Essentials

Summer School

Day

01

Place Value

Questions:

1. Write these numbers using numerals:
   a) eighteen b) seventy-eight c) two hundred and fifteen

2. Write the value of the underlined digit:
   a) 4<u>1</u>56 b) <u>9</u>675 c) 20<u>3</u>2 d) 2<u>5</u>6,917

3. 4526 as a partition sum is written as 4000 + 500 + 20 + 6
   Write as a partition sum: a) 465 b) 7209

4. Write these numbers using words:
   a) 385 b) 4016 c) 32,701 d) 2,305,619

5. Write the value of the underlined digit:
   a) 3<u>7</u>,215 b) 16,0<u>2</u>8 c) <u>1</u>08,097 d) 2,370,<u>6</u>19

6. 305,619 can be written as 300,000 + 5,000 + 600 + 10 + 9
   Write 4,075,250 as a partition sum.

Solutions:

1. a) 18 b) 78 c) 215

2. a) 100 b) 9000 c) 30 d) 50,000

3. a) 400 + 60 + 5 b) 7000 + 200 + 9

4. a) three hundred and eighty-five
   b) four thousand and sixteen
   c) thirty-two thousand, seven hundred and one
   d) 2,305,619 two million, three hundred and five thousand, six hundred and nineteen

5. a) 7000 b) 20 c) 100,000 d) 600

6. 4,000,000 + 70,000 + 5000 + 200 + 50

Essentials

Summer School

Day

02

Ordering Numbers

Questions:

1. Write these numbers in ascending order (smallest to largest):
   6748, 5720, 3057, 4720, 5842

2. Write these numbers in descending order (largest to smallest):
   4989, 5730, 5284, 5489, 4978

3. Write these numbers in order from least to greatest:
   3,267,876 6,765,232 3,783,273 3,876,237

4. Use the digits 2, 4, 5 and 7 to write the largest number possible.

5. Write the value of the underlined digit:
   a) 8̲16 b) 3̲2,675 c) 81̲65 d) 3̲50,085

6. Write as a partition sum:
   a) 816 b) 32,675 c) 8165 d) 350,085

7. a) Write 4,075,250 using words.
b) Write 'three hundred and eight thousand, two hundred and fifty' using numerals.

Solutions:

1. 3057, 4720, 5720, 5842, 6748

2. 5730, 5489, 5284, 4989, 4978

3. 3,267,876 3,783,273 3,876,237 6,765,232

4. 7542

5. a) 800 b) 2000 c) 60 d) 50,000

6. a) 800 + 10 + 6 b) 30,000 + 2,000 + 600 + 70 + 5
c) 8000 + 100 + 60 + 5 d) 300,000 + 50,000 + 80 + 5

7. a) Four million, seventy-five thousand, two hundred and fifty
b) 308,250

Essentials

Summer School

Day

03

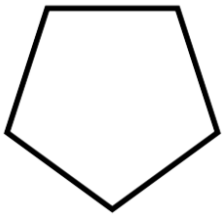
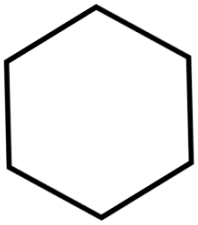
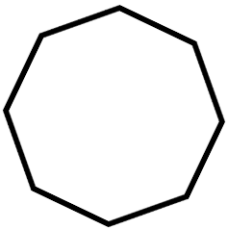
Polygons

Questions:

1. Write the name of the shape which has:
   a) 3 sides b) 8 sides c) 5 angles d) 4 sides

2. How many sides have these shapes?
   a) quadrilateral b) nonagon c) hexagon

3. How many angles have these shapes?
   a) heptagon b) decagon c) pentagon

4. What are the names of the shapes shown below?
   a) 
   b) 
   c) 

5. Write, in ascending order 5643, 3465, 5463, 4365, 3546

6. Write, in descending order 8576, 7586, 8756, 6875, 7865

7. Use the digits 3, 5, 2 and 9 to form the smallest number possible.

Solutions:

1. a) triangle b) octagon c) pentagon d) quadrilateral

2. a) 4 b) 9 c) 6

3. a) 7 b) 10 c) 5

4. a) pentagon b) hexagon c) octagon

5. 3465, 3546, 4365, 5463, 5643

6. 8756, 8576, 7865, 7586, 6875

7. 2359

Essentials

Summer School

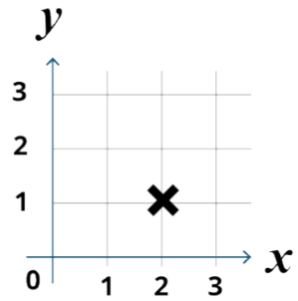
Day

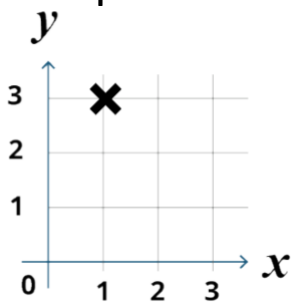
04

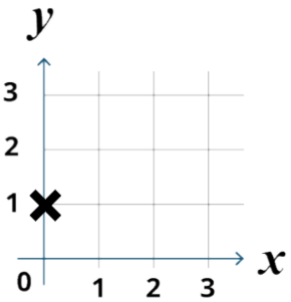
Coordinates

Questions:

1. Write the coordinates of the point shown:

a) 

b) 

c) 

2. On a pair of axes, plot the coordinates:

a) (1, 4) b) (3, 1) c) (0, 1) d) (4, 0)

3. Write the name of the shape with:

a) 8 angles b) 3 sides c) 6 sides d) 5 angles

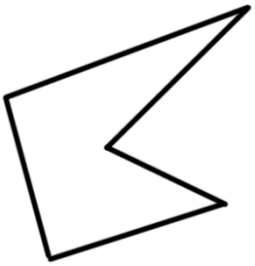
4. How many sides has:

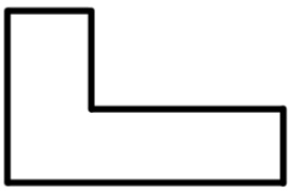
a) a quadrilateral? b) a decagon? c) a heptagon?

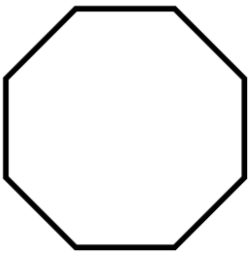
5. How many angles has:

a) a hexagon? b) a nonagon? C) a triangle?

6. What are the names of these shapes?

a) 

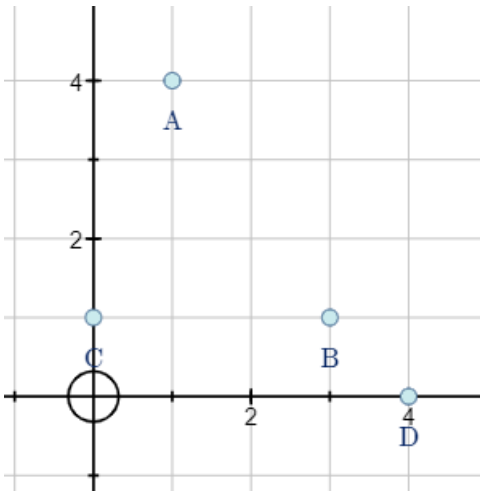
b) 

c) 

Solutions:

1. a) (2, 1) b) (1, 3) c) (0, 1)

2.



3. a) octagon b) triangle c) hexagon d) pentagon

4. a) 4 b) 10 c) 7

5. a) 6 b) 9 c) 3

6. a) pentagon b) hexagon d) octagon

Essentials

Summer School

Day

05

Decimal Place Value

Questions:

1. 15.87 as a partition sum is written as 10 + 5 + 0.8 + 0.07

   Write as a partition sum: a) 3.54 b) 27.25

2. 15.87 as a sum of decimal fractions is $10 + 5 + \frac{8}{10} + \frac{7}{100}$

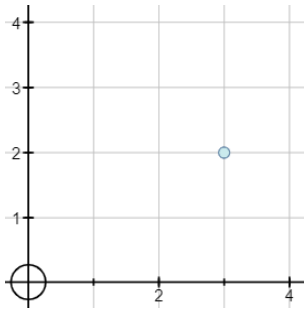
   Write as a sum of decimal fractions: a) 4.53 b) 57.22

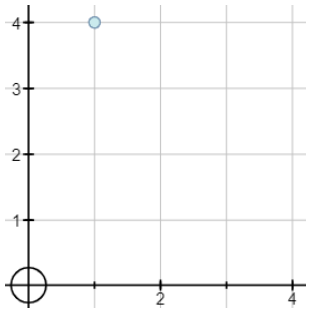
3. Write the value of the underlined digit:

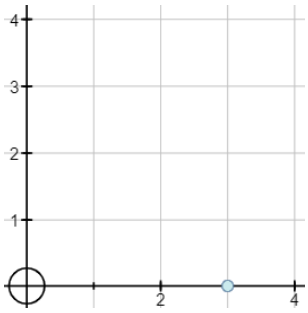
   a) 3.<u>7</u>2 b) 16.0<u>2</u>8 c) 23.70<u>6</u>

4. Use the digits 2, 4, 5 and 7 and a decimal point to write the smallest number possible.

5. Write the coordinates of the point shown:

   a) 

   b) 

   c) 

6. On a pair of axes, plot the coordinates:

   a) (3, 4) b) (4, 1) c) (0, 3) d) (1, 0)

Solutions:

1. a) 3 + 0.5 + 0.04 b) 20 + 7 + 0.2 + 0.05

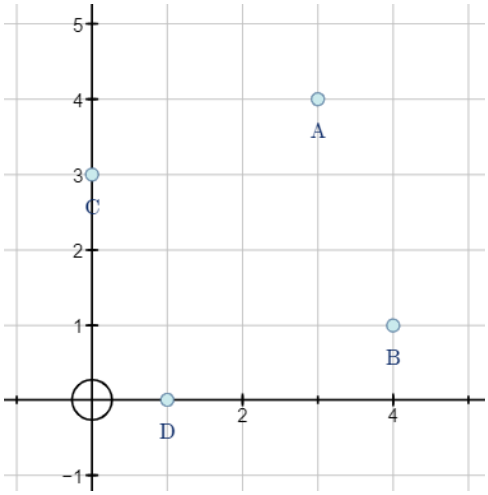
2. a) $4 + \frac{5}{10} + \frac{3}{100}$ b) $50 + 7 + \frac{2}{10} + \frac{2}{100}$

3. a) 7 tenths = $\frac{7}{10}$ b) 2 hundredths = $\frac{2}{100}$
   c) 6 thousandths = $\frac{6}{1000}$

4. 2.457

5. a) (3, 2) b) (1, 4) c) (3, 0)

6.



Essentials

Summer School

Day

06

Negative Numbers

Questions:

1. Replace the question marks with the correct numbers in these sequences:

a) 4, 2, 0, -2, -4, ?, ? b) -9, -7, ? , ?, -1, 1, 3

2. The temperature inside a building is 4°C. Outside it is 7°C colder. What is the temperature outside?

3. The temperature is recorded at midnight each day for one week in January, the results are shown below:

Monday -3°C, Tuesday -2°C, Wednesday -4°C,
Thursday -3°C, Friday -1°C, Saturday 0°C

a) Which day had the coldest recorded temperature?
b) On which day did the temperature rise two degrees?
c) Put the days in order from warmest to coldest.

4. Work out:

a) -2 + 5 b) 3 – 7 c) -2 – 7 d) -4 + 1

5. Write the value of the underlined digit:

a) 3,<u>7</u>28 b) 7<u>4</u>,580 c) 60<u>2</u>3 d) 4<u>7</u>0,803

6. Write the value of the underlined digit:

a) 3.<u>7</u>28 b) 0.74<u>5</u> c) 6.02<u>3</u> d) 0.4<u>7</u>83

Solutions:

1. a) 4, 2, 0, -2, -4, -6, -8 b) -9, -7, -5, -3, -1, 1, 3

2. -3°C

3. a) Wednesday
   b) Friday
   c) Saturday, Friday, Tuesday, Monday & Thursday, Wednesday

4. a) 3 b) -4 c) -9 d) -3

5. a) 700 b) 4000 c) 20 d) 70,000

6. a) $0.7 = \frac{7}{10}$ b) $0.005 = \frac{5}{1000}$ c) $0.003 = \frac{3}{1000}$
   d) $0.07 = \frac{7}{100}$

Essentials

Summer School

Day

07

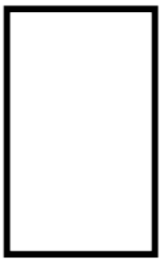
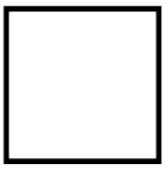
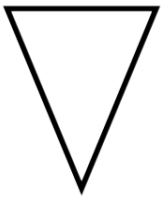
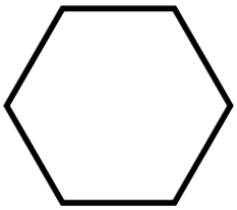
Reflection Symmetry

Questions:

1. How many lines of symmetry have these letters?

a) H b) F c) D d) N

2. How many lines of symmetry have these shapes?

a)  b)  c)  d) 

3. Write these numbers in order from greatest to least:

45,308 48,503 48,305 50,348

4. Use the digits 5, 2, 8 and 6 to write the smallest number possible.

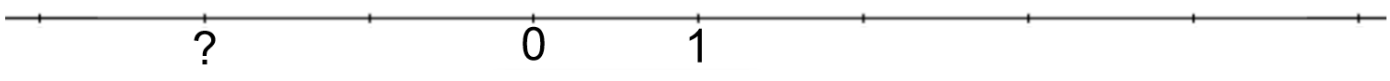
5. Write these numbers in order from least to greatest:

1 -3 0 -2 2 -5

6. Work out:

a) -7 + 5 b) 3 – 6 c) -2 + 5 d) -3 - 2

7. What number does the question mark represent?



Solutions:

1. a) 2 b) 0 c) 1 d) 0

2. a) 4 b) 2 c) 1 d) 6

3. 50,348 48,503 48,305 45,308

4. 2568

5. -5 -3 -2 0 1 2

6. a) -2 b) -3 c) 3 d) -5

7. -2

Essentials

Summer School

Day

08

Comparing Decimals

Questions:

1. Which of these pairs of numbers is the greatest?

a) 0.17 0.19 b) 0.17 0.2 c) 0.8 0.517

2. Write these numbers in ascending order (smallest to largest):

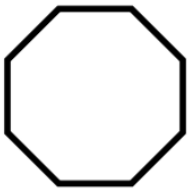
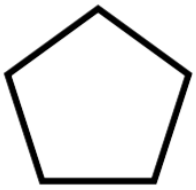
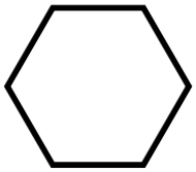
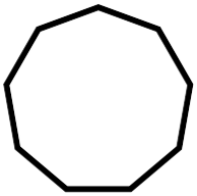
0.37, 0.5, 0.418, 0.3, 0.43

3. Write these numbers in descending order (largest to smallest):

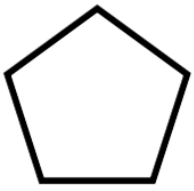
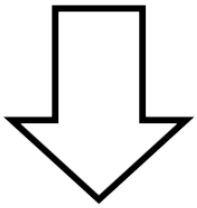
0.76, 0.685, 0.7, 0.745, 0.7045

4. Use the digits 4, 1, 7 and 5, with a decimal point to write the smallest number possible.

5. Write the name of these polygons:

a)  b)  c)  d) 

6. How many lines of symmetry do these shapes have?

a) M b)  c) L d) 

Solutions:

1. a) 0.19 b) 0.2 c) 0.8

2. 0.3, 0.37, 0.418, 0.43, 0.5

3. 0.76, 0.745, 0.7045, 0.7, 0.685

4. 1.475

5. a) octagon b) pentagon c) hexagon d) nonagon

6. a) 1 b) 5 c) 0 d) 1

Essentials

Summer School

Day

09

Addition

Questions:

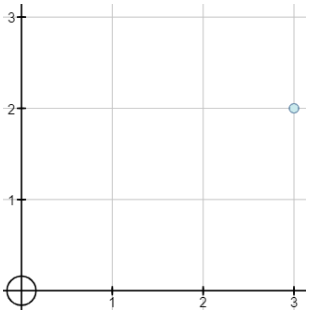
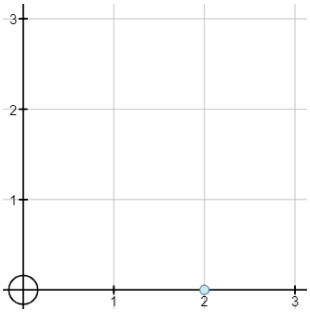
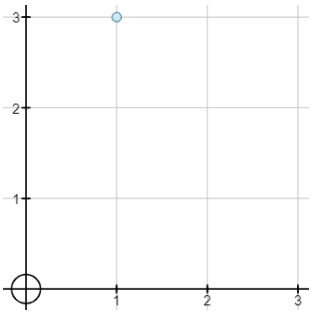
1. Work out:
   a) 23 + 56 b) 312 + 253 c) 3145 + 533

2. Calculate:
   a) 37 + 14 b) 357 + 65 c) 2157 + 95

3. Evaluate:
   a) 2.1 + 3.7 b) 3.1 + 2.78 c) 13.5 + 6.58

4. Write these numbers in ascending order (smallest to largest):
   0.61, 0.575, 0.6, 0.59, 0.5004

5. Write these numbers in descending order (largest to smallest):
   0.42, 0.378, 0.38, 0.4, 0.402

6. Write the coordinates of the points shown:
   a) 
   b) 
   c) 

Solutions:

1. a) 79 b) 565 c) 3678

2. a) 51 b) 422 c) 2252

3. a) 5.8 b) 5.88 c) 20.08

4. 0.5004, 0.575, 0.59, 0.6, 0.61

5. 0.42, 0.402, 0.4, 0.38, 0.378

6. a) (3, 2) b) (2, 0) c) (1, 3)

Essentials

Summer School

Day

10

Subtraction

Questions:

1. Work out:
   a) 86 - 34 b) 485 - 321 c) 3856 - 245

2. Calculate:
   a) 23 – 9 b) 315 - 78 c) 2021 - 339

3. Evaluate:
   a) 3.7 – 1.6 b) 4.3 – 2.68 c) 17.4 – 8.95

4. Work out:
   a) 215 + 79 b) 2347 + 958 c) 13.6 + 2.715

5. Write the value of the underlined digit:
   a) 2.8<u>5</u>7 b) 8.<u>2</u>57 c) 2.08<u>5</u>7 d) 7.2058<u></u>

6. What numbers replace the question marks?
   a) 0.5, 0.7, 0.9, ?, 1.3, 1.5, ? b) 1.7, 1.4, 1.1, ?, 0.5, ?, -0.1

Solutions:

1. a) 52 b) 164 c) 3611

2. a) 14 b) 237 c) 1682

3. a) 2.1 b) 1.62 c) 8.45

4. a) 294 b) 3305 c) 16.315

5. a) $0.05 = \frac{5}{100}$ b) $0.2 = \frac{2}{10}$ c) $0.005 = \frac{5}{1000}$
   d) $0.0008 = \frac{8}{10000}$

6. a) 0.5, 0.7, 0.9, 1.1, 1.3, 1.5, 1.7
b) 1.7, 1.4, 1.1, 0.8, 0.5, 0.2, -0.1

Essentials

Summer School

Day

11

Multiplication (Times Tables)

Questions:

1. Work out:

a) 2 × 5	b) 9 × 1	c) 7 × 10	d) 3 × 4
e) 11 × 6	f) 4 × 9	g) 6 × 3	h) 7 × 5
i) 8 × 3	j) 12 × 6	k) 7 × 8	l) 9 × 12

2. Calculate:

a) 70 ÷ 10	b) 10 ÷ 2	c) 9 ÷ 1	d) 12 ÷ 3
e) 36 ÷ 4	f) 18 ÷ 6	g) 66 ÷ 11	h) 35 ÷ 7
i) 24 ÷ 8	j) 56 ÷ 7	k) 72 ÷ 12	l) 108 ÷ 9

3. Evaluate:

a) 38 - 15	b) 231 – 58	c) 13.2 – 6.75

4. Work out:

a) -6 + 5	b) 3 - 8	c) -5 + 9	d) -3 - 2

Solutions:

1.	a) 10	b) 9	c) 70	d) 12
	e) 66	f) 36	g) 18	h) 35
	i) 24	j) 72	k) 56	l) 108
2.	a) 7	b) 5	c) 9	d) 4
	e) 9	f) 3	g) 6	h) 5
	i) 3	j) 8	k) 6	l) 12
3.	a) 23	b) 173	c) 6.45	
4.	a) -1	b) -5	c) 4	d) -5

Essentials

Summer School

Day

12

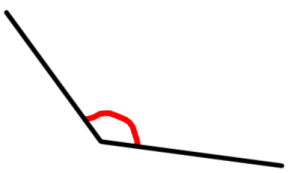
Angles

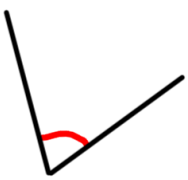
Questions:

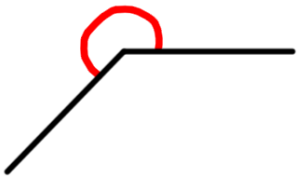
1. If an angle measures the following, what would it be called?

a) 40° b) 90° c) 110° d) 200°

2. Describe these angles:

a) 

b) 

c) 

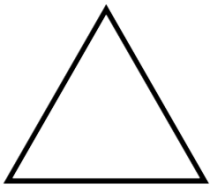
3. How many right angles make a full turn?

4. Work out:

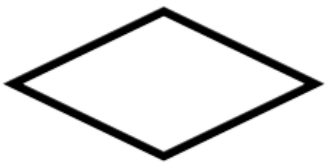
a) 3 × 6	b) 30 ÷ 3	c) 4 × 6	d) 7 × 3
e) 9 × 8	f) 45 ÷ 5	g) 6 × 7	h) 48 ÷ 6
i) 6 × 9	j) 28 ÷ 4	k) 42 ÷ 7	l) 12 × 8

5. How many lines of symmetry have these shapes?

a) 

b) 

c) 

d) 

Solutions:

1. a) acute b) right angle c) obtuse d) reflex

2. a) obtuse b) acute c) reflex

3. 4 right angles make a full turn

4. a) 18 b) 10 c) 24 d) 21
   e) 72 f) 9 g) 42 h) 8
   i) 54 j) 7 k) 6 l) 96

5. a) 1 b) 3 c) 0 d) 2

Essentials

Summer School

Day **13**

Addition and Subtraction of Decimals

Questions:

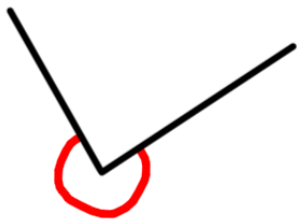
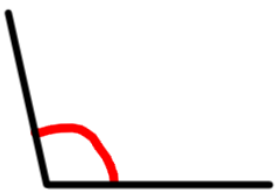
1. Work out:
   a) 3.2 + 5.4 b) 3.12 + 2.6 c) 2.7 + 6.4

2. Calculate:
   a) 6.8 – 3.1 b) 8.37 – 2.1 c) 9.545 – 7.225

3. Evaluate:
   a) 3.57 + 6.85 b) 9.85 + 3.3 c) 13.5 + 6.58 + 2.77

4. Work out:
   a) 13.4 – 6.8 b) 9.65 – 3.9 c) 13.2 – 6.57

5. Write these angles in ascending order (smallest to largest):
   right angle obtuse acute reflex straight line

6. Write the name of the angle shown:
   a) 
   b) 
   c) 

7. Write these decimas in ascending order (smallest to largest):
   0.78 0.715 0.83 0.801 0.79 0.785

Solutions:

1. a) 8.6 b) 5.72 c) 9.1

2. a) 5.7 b) 6.27 c) 2.32

3. a) 10.42 b) 13.15 c) 22.85

4. a) 6.6 b) 5.75 c) 6.63

5. acute, right angle, obtuse, straight line, reflex

6. a) reflex b) acute c) obtuse

7. 0.715, 0.78, 0.785, 0.79, 0.801, 0.83

Essentials

Summer School

Day

14

Long and Short Multiplication

Questions:

1. Work out:
   a) 17 × 8 b) 365 × 4 c) 1407 × 5

2. Calculate:
   a) 13 × 14 b) 15 × 24 c) 215 × 18

3. Work out:
   a) 109 + 23 b) 2379 + 285 c) 2034 + 649 + 82

4. Evaluate:
   a) 2.7 + 6.5 b) 19.65 + 3.6 c) 24.7 + 3.74 + 2.89

5. Work out:
   a) 27.8 – 6.5 b) 8.35 – 3.8 c) 23.2 – 8.86

Solutions:

1.	a) 136	b) 1,460	c) 7,035
2.	a) 182	b) 360	c) 3,870
3.	a) 132	b) 2,664	c) 2,765
4.	a) 9.2	b) 23.25	c) 31.33
5.	a) 21.3	b) 4.55	c) 14.34

Essentials

Summer School

Day

15

Short Division

Questions:

1. Work out:
   a) 65 ÷ 5 b) 68 ÷ 4 c) 75 ÷ 3

2. Calculate:
   a) 354 ÷ 2 b) 174 ÷ 3 c) 468 ÷ 6

3. Evaluate:
   a) 371 ÷ 7 b) 552 ÷ 8 c) 276 ÷ 12

4. Work out:
   a) 85 – 27 b) 315 - 76 c) 2021 - 343

5. Work out:
   a) 43 × 5 b) 48 × 15 c) 285 × 12

Solutions:

1.	a) 13	b) 17	c) 25
2.	a) 177	b) 58	c) 78
3.	a) 53	b) 69	c) 23
4.	a) 58	b) 239	c) 1,678
5.	a) 215	b) 720	c) 3,420

Essentials

Summer School

Day

16

Order of Operations

Questions:

1. Work out:
   a) $3 + 5 \times 2$ b) $10 - 4 \times 2$ c) $12 + 8 \div 2$

2. Calculate:
   a) $(3 + 5) \times 2$ b) $(10 - 4) \times 2$ c) $(12 + 8) \div 2$

3. Evaluate:
   a) $78 \div 3$ b) $285 \div 5$ c) $1512 \div 12$

4. Work out:
   a) 3×6 b) $27 \div 3$ c) 4×8 d) 7×5
   e) 9×6 f) $35 \div 5$ g) 6×4 h) $42 \div 6$
   i) 8×9 j) $24 \div 8$ k) $63 \div 7$ l) 12×9

Solutions:

1. a) 13 b) 2 c) 16

2. a) 16 b) 12 c) 10

3. a) 26 b) 57 c) 126

4. Work out:

a) 18	b) 9	c) 32	d) 35
e) 54	f) 7	g) 24	h) 7
i) 72	j) 3	k) 9	l) 108

Essentials

Summer School

Day

17

Tally Charts

Questions:

1. red red blue red yellow green
   blue red blue green blue red
   yellow blue green red yellow red

   Complete the tally chart:

Colour	Tally	Frequency
Blue		
Green		
Red		
Yellow		

2. Calculate:

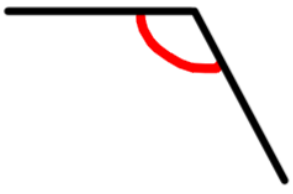
   a) 12 + 2 × 4 b) (12 + 2) × 4 c) 30 – 18 ÷ 6
   d) (30 – 18) ÷ 6 e) 15 – 2 × 6 f) 20 + 8 ÷ 4

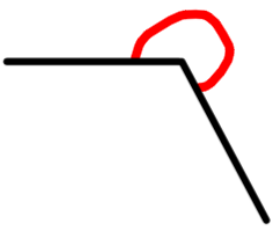
3. Write these angles in order from smallest to largest:

   straight line right angle reflex acute obtuse

4. Write the type of angle shown:

   a) b) c)





Solutions:

1.

Colour	Tally	Frequency
Blue	𝍸	5
Green	𝍷	3
Red	𝍸 𝍷	7
Yellow	𝍷	3

2. a) 20 b) 56 c) 27
   d) 2 e) 3 f) 22

3. acute right angle obtuse straight line reflex

4. a) obtuse b) reflex c) acute

Essentials

Summer School

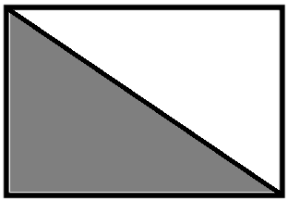
Day

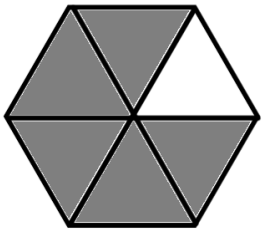
18

Fractions

Questions:

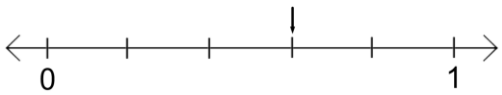
1. What fraction is shaded?

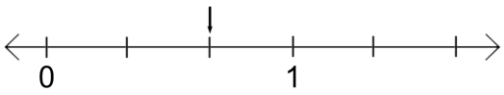
a) 

b) 

c) 

2. What fraction is the arrow pointing to?

a) 

b) 

3.

red	red	blue	red	yellow
blue	blue	blue	green	blue
yellow	blue	green	red	yellow

Complete the tally chart:

Colour	Tally	Frequency
Blue		
Green		
Red		
Yellow		

4. Calculate:

a) 3.5 + 4.1 b) 17.8 – 3.4 c) 12.3 – 7.5

d) 25.7 + 8.5 e) 7.49 + 8.7 f) 8.6 – 5.21

Solutions:

1. a) $\frac{1}{2}$ b) $\frac{5}{6}$ c) $\frac{7}{10}$

2. a) $\frac{3}{5}$ b) $\frac{2}{3}$

3.

Colour	Tally	Frequency
Blue	𝍸 I	6
Green	II	2
Red	IIII	4
Yellow	III	3

4. a) 7.6 b) 14.4 c) 4.8
   d) 34.2 e) 16.19 f) 3.39

Essentials

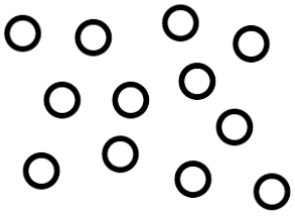
Summer School

Day

19

Fractions of Amounts

Questions:

1. 

Shown are 12 dots. Use this diagram to find:

a) $\frac{1}{4}$ of 12 b) $\frac{1}{2}$ of 12 c) $\frac{1}{6}$ of 12

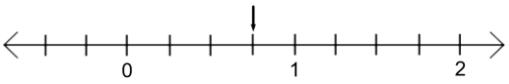
2. Calculate:

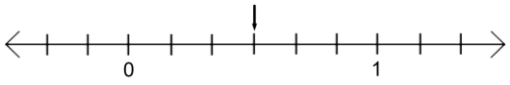
a) $\frac{1}{3}$ of 12 b) $\frac{1}{5}$ of 20 c) $\frac{1}{10}$ of 80

3. What fraction is shaded?

a)  b)  c) 

4. What number is the arrow pointing to?

a) 

b) 

5. Calculate:

a) 13 × 9 b) 17 × 12 c) 163 × 19

Solutions:

1. a) 3 b) 6 c) 2

2. a) 4 b) 4 c) 8

3. a) $\frac{2}{3}$ b) $\frac{3}{5}$ c) $\frac{2}{4}$

4. a) $\frac{3}{4}$ b) $\frac{3}{6}$

5. a) 117 b) 204 c) 3,078

Essentials

Summer School

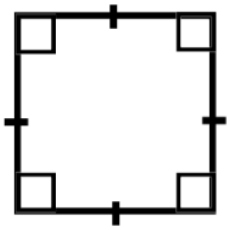
Day

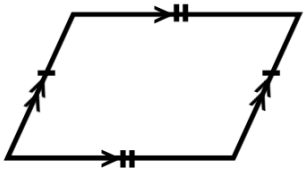
20

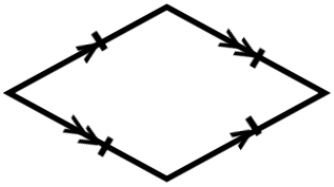
Quadrilateral

Questions:

1. Write the name of these shapes:

a) 

b) 

c) 

2. Draw the following shapes:?

a) rectangle b) kite c) trapezium

3. Calculate:

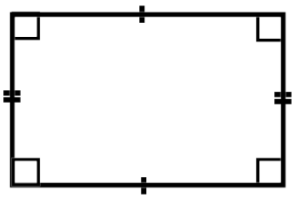
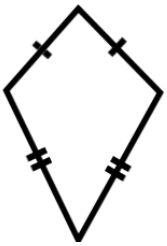
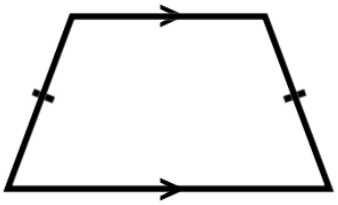
a) $\frac{1}{3}$ of 18 b) $\frac{1}{5}$ of 20 c) $\frac{1}{2}$ of 24

4. Work out:

a) 378 ÷ 3 b) 230 ÷ 5 c) 176 ÷ 4

Solutions:

1. a) square b) parallelogram c) rhombus

2. a)  b)  c) 

3. a) 6 b) 4 c) 12

4. a) 126 b) 46 c) 44

Essentials

Summer School

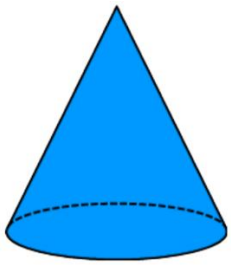
Day

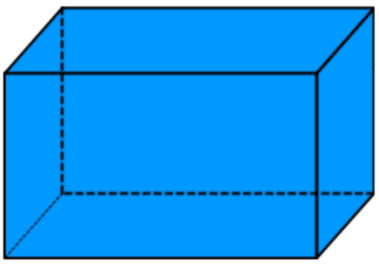
21

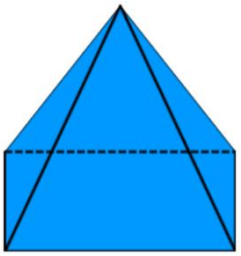
3D Solids

Questions:

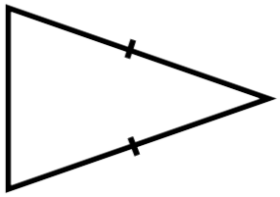
1. Write the name of these solids:

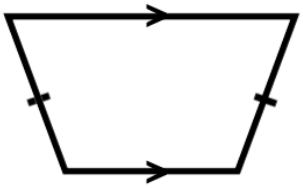
a) 

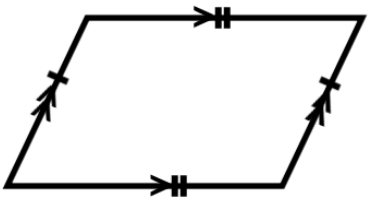
b) 

c) 

2. Write the name of these shapes:

a) 

b) 

c) 

3. Draw:

a) a rhombus

b) a cube

c) a right-angled triangle

4. Calculate:

a) $12 - 4 \times 3$

b) $12 + 8 \div 4$

c) $8 - 4 + 1$

d) $(12 - 4) \times 3$

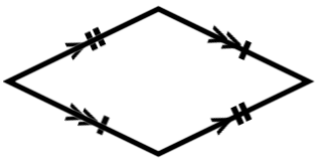
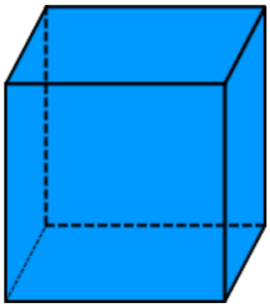
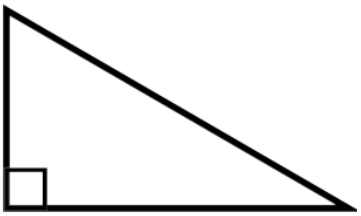
e) $(12 + 8) \div 4$

f) $8 - (4 + 1)$

Solutions:

1. a) cone b) cuboid c) square-based pyramid

2. a) isosceles triangle b) isosceles trapezium
   c) parallelogram

3. a)  b)  c) 

4. a) 0 b) 14 c) 5 d) 24 e) 5 f) 3

Essentials

Summer School

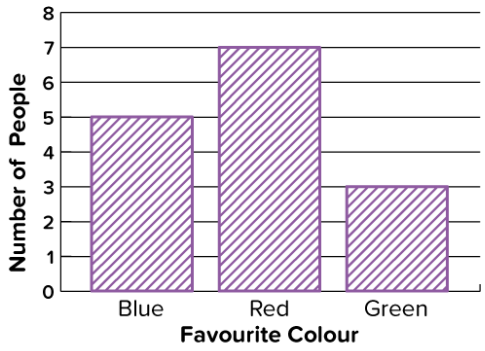
Day

22

Bar Charts

Questions:

1. Shown is a bar chart:



a) How many people were asked in total?
b) What was the most popular colour?
c) How many **more** people said red than said green?

2. The tally chart shows how Darren's friends travel to school.

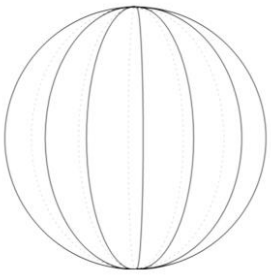
Transport	Number of people
Car	𝍸 𝍸 ||||
Bus	||||
Walk	𝍸 ||
Bike	|||

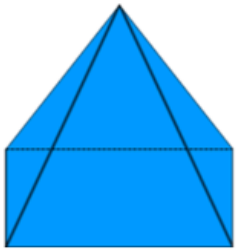
Show this information in a bar chart.

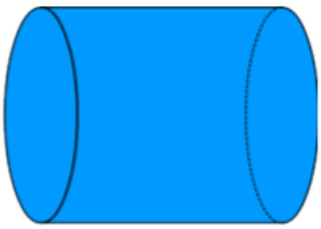
3. Draw:

a) a cuboid b) a rectangle c) a cone

4. Write the name of these solids:

a) 

b) 

c) 

5. Some people were asked their favourite sport. Show the results in a tally chart:

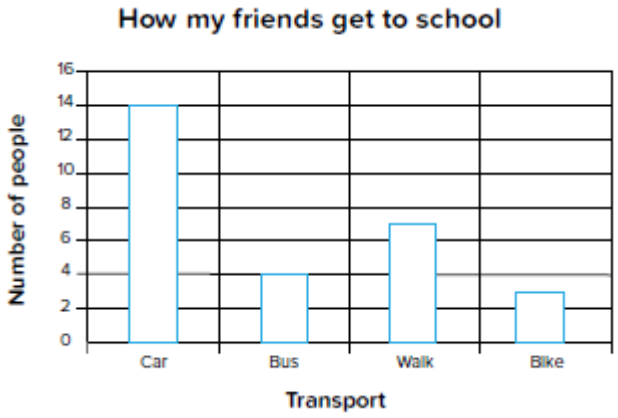
Football Tennis Football Football Tennis Cricket Cricket
Tennis Football Football Netball Netball Cricket Tennis
Netball Hockey Hockey Football Tennis Football Hockey
Cricket Netball Football Football Football Hockey Cricket
Netball Football Football Netball Hockey Football Cricket

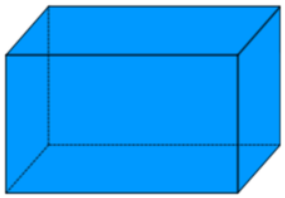
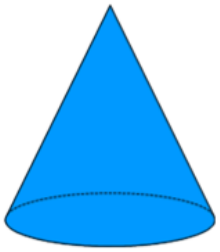
Favourite Sport	Tally
Football	
Tennis	
Cricket	
Netball	
Hockey	

Solutions:

1. a) 15 b) Red c) 4

2.



3. a)  b)  c) 

4. a) sphere b) square-based pyramid c) cylinder

5.

Favourite Sport	Tally
Football	𝍸 𝍸 III
Tennis	𝍸
Cricket	𝍸 I
Netball	𝍸 I
Hockey	𝍸

Essentials

Summer School

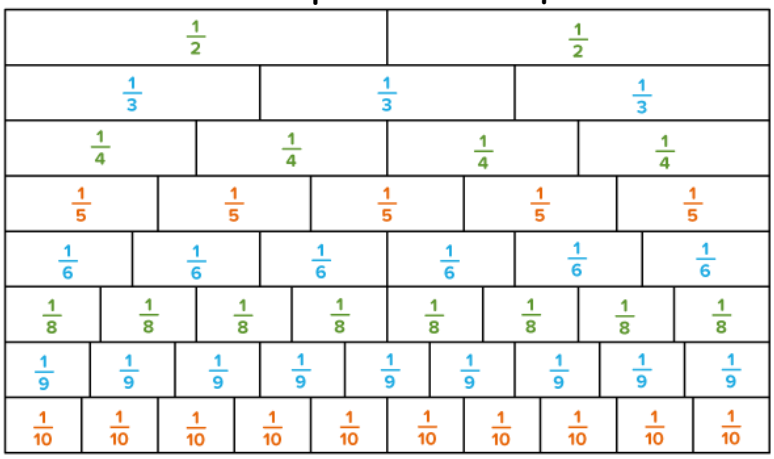
Day

23

Equivalent Fractions

Questions:

1. Use the fraction wall to complete the equivalent fractions:



a) $\frac{1}{3} = \frac{\quad}{6}$ b) $\frac{2}{3} = \frac{6}{\quad}$ c) $\frac{\quad}{2} = \frac{5}{10}$ d) $\frac{3}{\quad} = \frac{6}{8}$

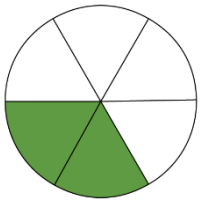
2. Complete the equivalent fractions:

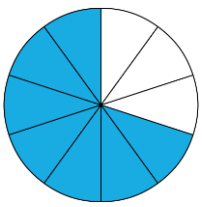
a) $\frac{1}{3} = \frac{\quad}{15}$ b) $\frac{2}{3} = \frac{8}{\quad}$ c) $\frac{\quad}{4} = \frac{12}{16}$ d) $\frac{5}{\quad} = \frac{20}{32}$

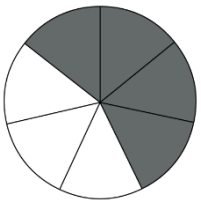
3. Show this information in a bar chart:

Cake	Number Sold
Victoria sponge	15
Chocolate cake	10
Cherry bakewells	20
Eccles cakes	5

4. What fraction is shaded?

a) 

b) 

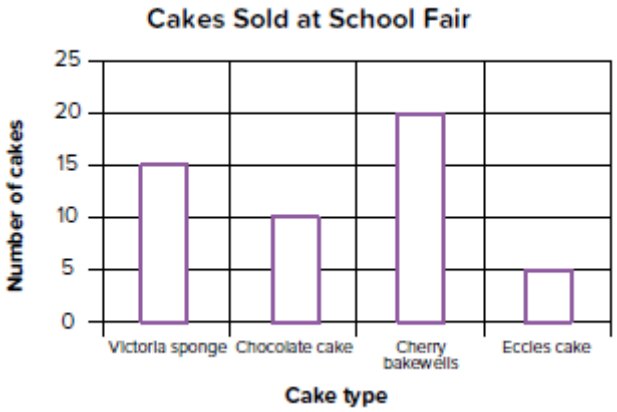
c) 

Solutions:

1. a) $\frac{1}{3} = \frac{2}{6}$ b) $\frac{2}{3} = \frac{6}{9}$ c) $\frac{1}{2} = \frac{5}{10}$ d) $\frac{3}{4} = \frac{6}{8}$

2. a) $\frac{1}{3} = \frac{5}{15}$ b) $\frac{2}{3} = \frac{8}{12}$ c) $\frac{3}{4} = \frac{12}{16}$ d) $\frac{5}{8} = \frac{20}{32}$

3.



4. a) $\frac{2}{6} = \frac{1}{3}$ b) $\frac{7}{10}$ c) $\frac{4}{7}$

Essentials

Summer School

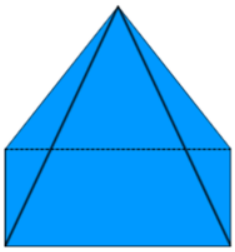
Day

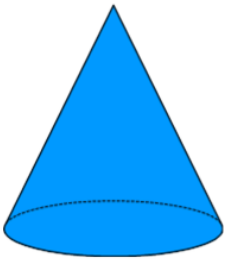
24

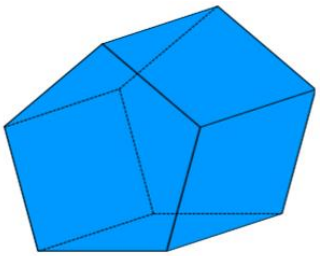
Faces, Edges and Vertices

Questions:

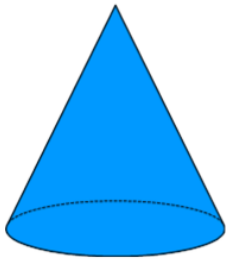
1. How many faces have these solids?

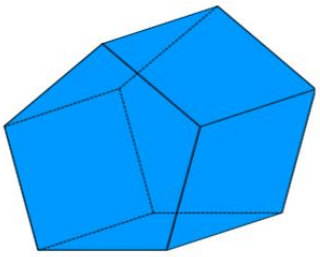
a) 

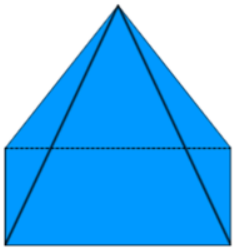
b) 

c) 

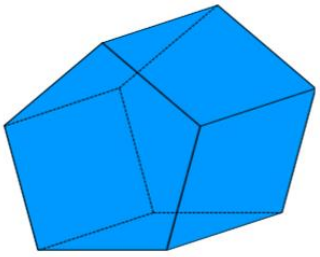
2. How many vertices have these solids?

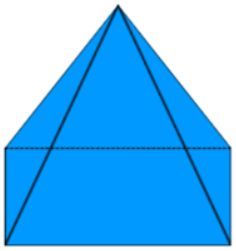
a) 

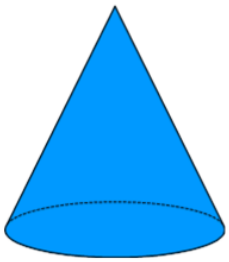
b) 

c) 

3. How many edges have these solids?

a) 

b) 

c) 

4. Complete these equivalent fractions:

a) $\frac{1}{5} = \frac{\quad}{35}$ b) $\frac{1}{3} = \frac{8}{\quad}$ c) $\frac{2}{3} = \frac{8}{\quad}$ d) $\frac{2}{\quad} = \frac{24}{60}$

5. Calculate:

a) $\frac{1}{5}$ of 40 b) $\frac{1}{6}$ of 30 c) $\frac{1}{8}$ of 72

Solutions:

1. a) 5 b) 2 c) 7

2. a) 1 b) 10 c) 5

3. a) 15 b) 8 c) 1

4. a) $\frac{1}{5} = \frac{7}{35}$ b) $\frac{1}{3} = \frac{8}{24}$ c) $\frac{2}{3} = \frac{8}{12}$ d) $\frac{2}{5} = \frac{24}{60}$

5. a) 8 b) 5 c) 9

Essentials

Summer School

Day

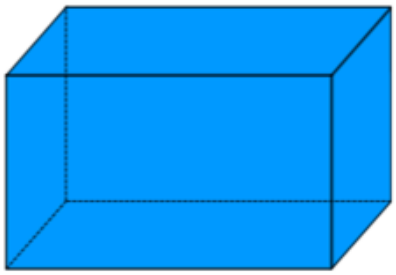
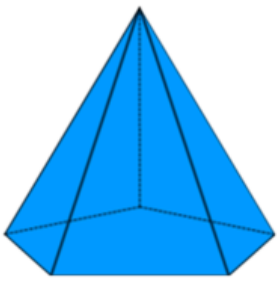
25

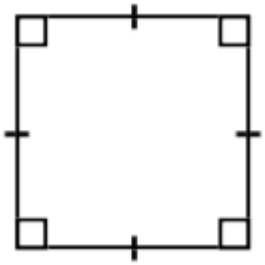
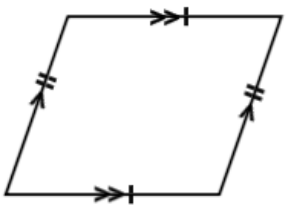
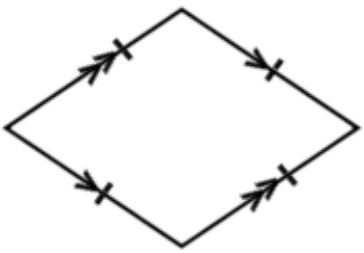
Algebraic Notation

Questions:

1. Write the algebraic expression which means:
   a) n multiplied by 3
   b) 7 more than p
   c) subtract x from 10
   d) the sum of 3 and a

2. Write in words what these algebraic expressions means
   a) n - 4
   b) 5p
   c) $\frac{r}{3}$
   d) t + 13

3. Write the number of faces, edges and vertices these shapes have:
   a)
   
   b)
   

4. Write the name of these shapes:
   a)
   
   b)
   
   c)
   

Solutions:

1. a) 3n b) p + 7 c) 10 - x d) 3 + a

2. a) subtract 4 from n b) multiply p by 5
   c) divide r by 3 d) 13 more than t

3. a) 6 faces, 12 edges, 8 vertices
   b) 6 faces, 10 edges, 6 vertices

4. a) square b) parallelogram c) rhombus

Essentials

Summer School

Day

26

Substitution

Questions:

1. Calculate the value of these expressions when a = 6.

a) a + 5 b) 4a c) a - 4 d) $\frac{a}{3}$

2. x = 3, y = 2 and z = 5. Calculate the value of:

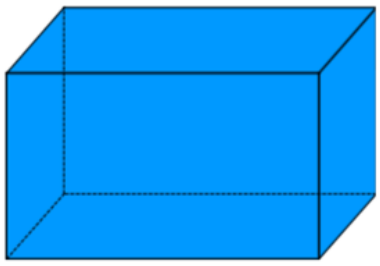
a) 5x b) 5x + y c) 5x + 4z d) 4z – 5x

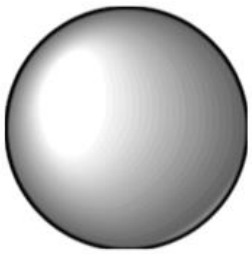
3. Write these expressions algebraically:

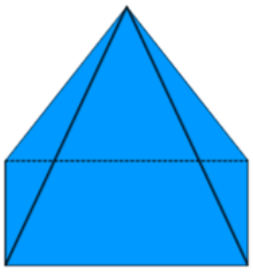
a) d multiplied by 8 b) 8 more than d

c) d less than 8 d) d divided by 8

4. Write the name of these solids:

a) 

b) 

c) 

Solutions:

1. a) 11 b) 24 c) 2 d) 2

2. a) 15 b) 17 c) 35 d) 5

3. a) 8d b) d + 8 c) 8 – d d) $\frac{d}{8}$

4. a) cuboid b) sphere c) square-based pyramid

Essentials

Summer School

Day

27

Simplify Fractions

Questions:

1. Simplify fully:

a) $\frac{3}{15}$ b) $\frac{5}{15}$ c) $\frac{6}{15}$ d) $\frac{10}{15}$

e) $\frac{10}{12}$ f) $\frac{9}{12}$ g) $\frac{9}{15}$ h) $\frac{9}{36}$

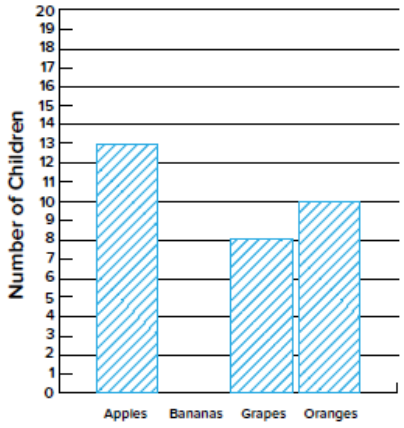
2. Calculate the value of these expressions when n = 5:

a) 6n b) n + 11 c) 13 – n d) $\frac{20}{n}$

3. a = 1, b = 5, c = 2. Calculate the value of:

a) 3c b) 3c + 1 c) 3c + 2b d) 4b – 3c

4. A group of children were asked about their favourite fruits. The results are shown:



a) How many children said 'Oranges'?
b) How many children said 'Bananas'?
c) What was the most popular fruit?
d) How many more people said 'Apples' than 'Grapes'?

Solutions:

1. a) $\frac{1}{5}$ b) $\frac{1}{3}$ c) $\frac{2}{5}$ d) $\frac{2}{3}$
   e) $\frac{5}{6}$ f) $\frac{3}{4}$ g) $\frac{3}{5}$ h) $\frac{1}{4}$

2. a) 30 b) 16 c) 8 d) 4

3. a) 6 b) 7 c) 16 d) 14

4. a) 10 b) 0 c) 'Apples' d) 5

Essentials

Summer School

Day **28**

More Complex Fractions of Amounts

Questions:

1. Calculate:

a) $\frac{2}{3}$ of 12 b) $\frac{2}{5}$ of 20 c) $\frac{3}{10}$ of 80

d) $\frac{3}{5}$ of 60 e) $\frac{7}{10}$ of 20 f) $\frac{7}{12}$ of 60

2. Simplify fully:

a) $\frac{15}{25}$ b) $\frac{9}{15}$ c) $\frac{8}{10}$ d) $\frac{9}{18}$

3. Complete the equivalent fractions:

a) $\frac{2}{5} = \frac{\quad}{15}$ b) $\frac{9}{10} = \frac{27}{\quad}$ c) $\frac{1}{\quad} = \frac{7}{21}$ d) $\frac{\quad}{6} = \frac{45}{54}$

Solutions:

1. a) 8 b) 8 c) 24 d) 12 e) 14 f) 35

2. a) $\frac{3}{5}$ b) $\frac{3}{5}$ c) $\frac{4}{5}$ d) $\frac{1}{2}$

3. a) $\frac{2}{5} = \frac{6}{15}$ b) $\frac{9}{10} = \frac{27}{30}$ c) $\frac{1}{3} = \frac{7}{21}$ d) $\frac{5}{6} = \frac{45}{54}$

Essentials

Summer School

Day **29**

Time

Questions:

1. How many…
   a) days in a week?
   b) weeks in a year?
   c) months in a year?
   d) days in a year?
   e) hours in a day?
   f) minutes in an hour?
   g) seconds in a minute?
   h) days in August?

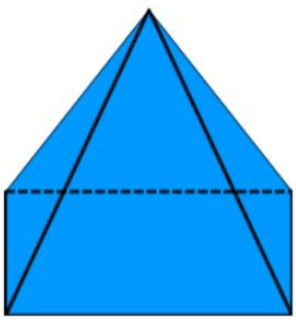
2. How long between…
   a) 08:10 and 08:55?
   b) 08:30 and 09:10?
   c) 08:40 and 11:15?
   d) 08:55 and 11:15?

3. Write these times in 24-hour time:
   a) 10:45am b) 1:30pm c) 5:10pm d) 9:35pm

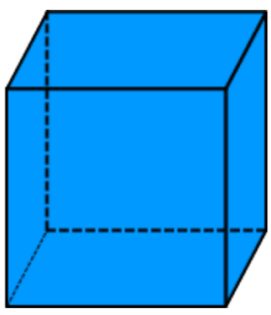
4. It is now 12:30. How long is it until…
   a) 14:45? b) 16:30? c) 17:10? d) 21:15?

5. Calculate:
   a) $\frac{2}{5}$ of 30 b) $\frac{3}{8}$ of 24 c) $\frac{7}{10}$ of 60

6. How many faces, edges and vertices do these solids have?
   a)



   b)



Solutions:

1. a) 7 b) 52 c) 12 d) $365\frac{1}{4}$
   e) 24 f) 60 g) 60 h) 31

2. a) 45 minutes b) 40 minutes
   c) 2 hours and 35 minutes d) 2 hours and 20 minutes

3. a) 10:45 b) 13:30 c) 17:10 d) 21:35

4. a) 2 hours and 15 minutes b) 4 hours
   c) 4 hours and 40 minutes d) 8 hours and 45 minutes

5. a) 12 b) 9 c) 42

6. a) 5 faces, 8 edges, 5 vertices
   b) 6 faces, 12 edges, 8 vertices

Essentials

Summer School

Day

30

Decimals and Fractions

Questions:

1. Write these decimals as fractions:
   a) 0.3 b) 0.03 c) 0.23 d) 0.203

2. Write these fractions as decimals:
   a) $\frac{1}{4}$ b) $\frac{1}{5}$ c) $\frac{2}{5}$ d) $\frac{7}{20}$

3. How many…
   a) days in a year? b) hours in a day?
   c) seconds in a minute? d) days in September?

4. Write these expressions algebraically:
   a) p divided by 6 b) r multiplied by 3
   c) 3 more than s d) 7 less than t

5. What do these algebraic expressions mean?
   a) b + 5 b) $\frac{c}{3}$ c) 5d d) 15 - f

Solutions:

1. a) $\frac{3}{10}$ b) $\frac{3}{100}$ c) $\frac{23}{100}$ d) $\frac{203}{1000}$

2. a) 0.25 b) 0.2 c) 0.4 d) 0.35

3. a) $365\frac{1}{4}$ b) 24 c) 60 d) 30

4. a) $\frac{p}{6}$ b) 3r c) s + 3 d) t - 7

5. a) 5 more than b
   b) c divided by 3
   c) d multiplied by 5
   d) f less than 15

Essentials

Summer School

Day

31

Units of Measure

Questions:

1. Which metric unit would you use measure:
   a) the distance between two cities?
   b) the mass of a bag of crisps?
   c) the length of a pencil?
   d) the height of a building?
   e) the mass of a person?
   f) the capacity of a swimming pool?

2. Complete the following:
   a) a man is approximately 180 …… tall
   b) an apple has a mass of approximately 100 ……
   c) a house is approximately 8 …… tall
   d) a drinks bottle holds approximately 500 ……

3. Write as a fraction:
   a) 0.7 b) 0.17 c) 0.017 d) 0.1

4. Write as a decimal:
   a) $\frac{3}{10}$ b) $\frac{3}{100}$ c) $\frac{1}{8}$ d) $\frac{3}{20}$

5. Write the value of the underlined digit:
   a) 4<u>1</u>75 b) 4<u>8</u>,309 c) 23<u>6</u>5 d) 2<u>6</u>1,085

6. x = 5. What is the value of these expressions?
   a) 3x b) 3x - 2 c) 25 – 3x d) 5x + 1

Solutions:

1. a) kilometres b) grams c) centimetres
   d) metres e) kilograms f) litres

2. a) centimetres b) grams c) metres d) millilitres

3. a) $\frac{7}{10}$ b) $\frac{17}{100}$ c) $\frac{17}{1000}$ d) $\frac{1}{10}$

4. a) 0.3 b) 0.03 c) 0.125 d) 0.15

5. a) 100 b) 8000 c) 60 d) 60,000

6. a) 15 b) 13 c) 10 d) 26

Essentials

Summer School

Day

32

Multiply and Divide by 10, 100, 1000

Questions:

1. Calculate:
   a) 3 × 100 b) 7 × 10 c) 3.2 × 1000 d) 7.3 × 100

2. Calculate:
   a) 73 ÷ 10 b) 375 ÷ 100 c) 7.6 ÷ 1000 d) 729 ÷ 10

3. Complete the following using a metric unit of measure:
   a) a dog is approximately 25 …… tall
   b) a car has a mass of approximately 500 ……
   c) a bath has a capacity of approximately 100 ……

4. Simplify fully:
   a) $\frac{5}{20}$ b) $\frac{15}{20}$ c) $\frac{12}{20}$ d) $\frac{12}{15}$

5. Write these numbers in ascending order (smallest to largest):
   3125, 1235, 1352, 1523, 2351, 2135

Solutions:

1. a) 300 b) 70 c) 3200 d) 730

2. a) 7.3 b) 3.75 c) 0.0076 d) 72.9

3. a) centimetres b) kilograms c) litres

4. a) $\frac{1}{4}$ b) $\frac{3}{4}$ c) $\frac{3}{5}$ d) $\frac{4}{5}$

5. 1235, 1352, 1523, 2135, 2351, 3125

Essentials

Summer School

Day **33**

Fractions, Decimals and Percentages

Questions:

1. Write as a decimal:
   a) $\frac{1}{2}$ b) 25% c) $\frac{7}{10}$ d) 30%

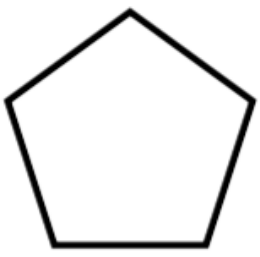
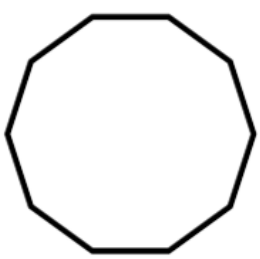
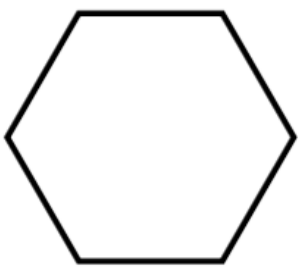
2. Write as a percentage:
   a) $\frac{1}{4}$ b) 0.5 c) 0.7 d) $\frac{3}{10}$

3. Write as a fraction:
   a) 25% b) 0.5 c) 0.7 d) 30%

4. Calculate:
   a) 3.2 × 100 b) 4.52 × 10 c) 9.3 × 1000

5. Calculate:
   a) 960 ÷ 100 b) 32 ÷ 1000 c) 3 ÷ 10

6. Work out:
   a) $\frac{2}{5}$ of 40 b) $\frac{3}{8}$ of 40 c) $\frac{7}{12}$ of 36

7. Write the name of these shapes:
   a)  b)  c) 

Solutions:

1. a) 0.5 b) 0.25 c) 0.7 d) 0.3

2. a) 25% b) 50% c) 70% d) 30%

3. a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) $\frac{7}{10}$ d) $\frac{3}{10}$

4. a) 320 b) 45.2 c) 9300

5. a) 9.6 b) 0.032 c) 0.3

6. a) 16 b) 15 c) 21

7. a) pentagon b) decagon c) hexagon

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Multiples

Questions:

1. Write the first five multiples of:

a) 3 b) 8 c) 5 d) 9

2. Which of these numbers is a **common** multiple of 4 and 6?

18 20 24 30

3. Complete the table:

Fraction	Decimal	Percentage
	0.5	
$\frac{1}{4}$		
		60%

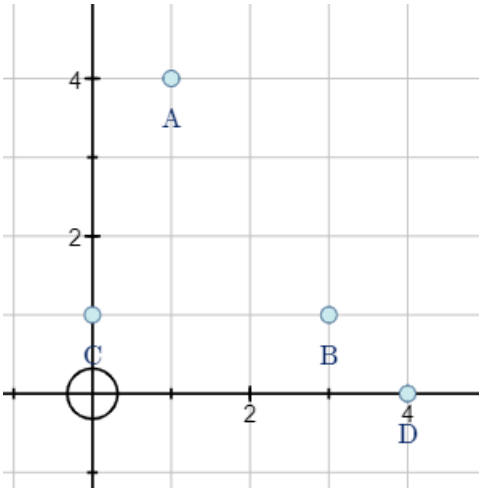
4. Write using 24-hour time:

a) 6am b) 6pm c) 7:30pm

5. How long is there between…:

a) 07:30 and 08:40? b) 08:50 and 11:20?

6. Write the coordinates shown:



Solutions:

1. a) 3, 6, 9, 12, 15 b) 8, 16, 24, 32, 40
   c) 5, 10, 15, 20, 25 d) 9, 18, 27, 36, 45

2. 24

3.

Fraction	Decimal	Percentage
$\frac{1}{2}$	0.5	50%
$\frac{1}{4}$	0.25	25%
$\frac{6}{10} = \frac{3}{5}$	0.6	60%

4. a) 06:00 b) 18:00 c) 19:30

5. a) 1 hour and 10 minutes b) 2 hours and 30 minutes

6. A (1, 4) B (3, 1) C) (0, 1) D) (4, 0)

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Factors

Questions:

1. Write the factors of:

a) 10 b) 12 c) 18 d) 20

2. Which number is not a factor of 30?

1 2 3 4 5 6

3. True or false?

a) 30 is a factor of 5 b) 5 is a factor of 40

4. Write the first five multiples of:

a) 2 b) 12 c) 7 d) 3

5. Write as a fraction:

a) 0.3 b) 0.4 c) 0.6 d) 0.75

6. Write as a decimal:

a) $\frac{1}{2}$ b) $\frac{7}{10}$ c) $\frac{7}{20}$ d) $\frac{1}{8}$

7. Write the value of the underlined digit:

a) 0.1<u>2</u>5 b) 3.<u>7</u>8 c) 13.7<u>8</u> d) 3.127<u>5</u>

Solutions:

1. a) 1, 2, 5, 10 b) 1, 2, 3, 4, 6, 12 c) 1, 2, 3, 6, 9, 18
   d) 1, 2, 4, 5, 10, 20

2. 4

3. a) False b) True

4. a) 2, 4, 6, 8, 10 b) 12, 24, 36, 48, 60
   c) 7, 14, 21, 28, 35 d) 3, 6, 9, 12, 15

5. a) $\frac{3}{10}$ b) $\frac{4}{10} = \frac{2}{5}$ c) $\frac{6}{10} = \frac{3}{5}$ d) $\frac{75}{100} = \frac{3}{4}$

6. a) 0.5 b) 0.7 c) 0.35 d) 0.125

7. a) $\frac{2}{100}$, two hundredths b) $\frac{7}{10}$, seven tenths
   c) $\frac{8}{100}$, eight hundredths d) $\frac{7}{1000}$, seven thousandths

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Metric Conversions

Questions:

1. Convert to centimetres:
   a) 3 metres b) 30 millimetres c) 2.1 metres

2. Convert to metres:
   a) 4 kilometres b) 300 centimetres c) 350 centimetres

3. Convert:
   a) 6 litres to millilitres b) 5000 grams to kilograms
   c) 3.5 kilograms to grams d) 3500 millilitres to litres

4. Write the factors of:
   a) 6 b) 15 c) 24 d) 30

5. Which metric unit would you use to measure…
   a) the height of a young child b) the mass of a person
   c) the capacity of a drink d) the length of a motorway

6. Work out:
   a) 2 - 6 b) -3 + 8 c) -9 + 5 d) -6 - 4

Solutions:

1. a) 300cm b) 3cm c) 210cm

2. a) 4000m b) 3m c) 3.5m

3. a) 6000ml b) 5kg c) 3500g d) 3.5l

4. a) 1, 2, 3, 6 b) 1, 3, 5, 15 c) 1, 2, 3, 4, 6, 8, 12, 24
   d) 1, 2, 3, 5, 6, 10, 15, 30

5. a) centimetres b) kilograms
   c) millilitres/centilitres/litres d) kilometres

6. a) -4 b) 5 c) -4 d) -10

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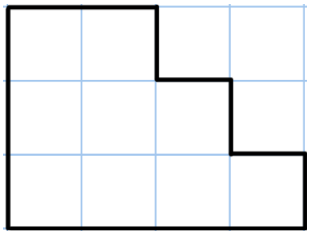
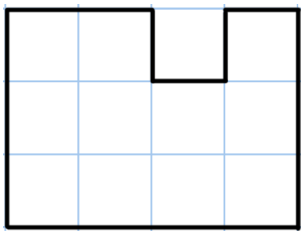
Perimeter

Questions:

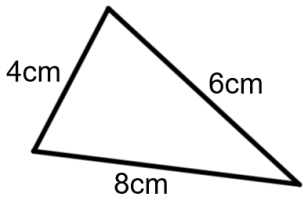
1. Write the perimeter of these shapes, drawn on 1cm-squared paper:

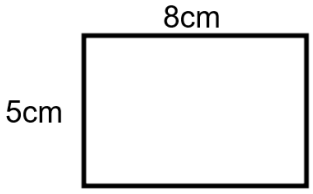
a) 

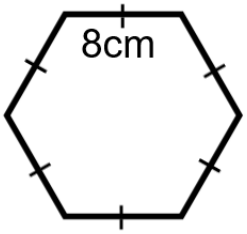
b) 

c) 

2. Calculate the perimeter of these shapes:

a) 

b) 

c) 

3. Convert:

a) 5kg to g b) 3500ml to l c) 2m to cm

4. Work out:

a) 2 × 1000 b) 4.75 × 10 c) 3.7 × 1000

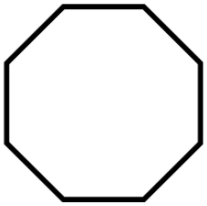
5. Calculate:

a) 350 ÷ 10 b) 4870 ÷ 100 c) 4800 ÷ 1000

6. How many lines of symmetry have these shapes?

a) 

b) 

c) 

Solutions:

1.	a) 14cm	b) 14cm	c) 16cm
2.	a) 18cm	b) 26cm	c) 48cm
3.	a) 5000g	b) 3.5l	c) 200cm
4.	a) 2000	b) 47.5	c) 3700
5.	a) 35	b) 48.7	c) 4.8
6.	a) 2	b) 4	c) 8

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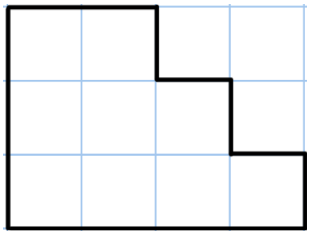
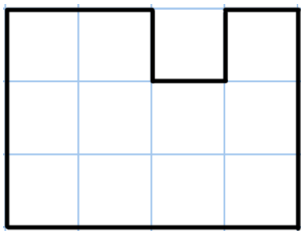
Area

Questions:

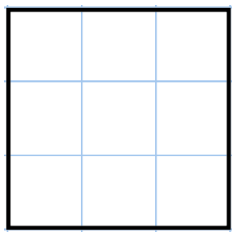
1. Write the area of these shapes, drawn on 1cm-squared paper:

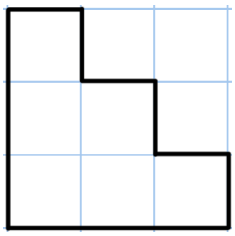
a) 

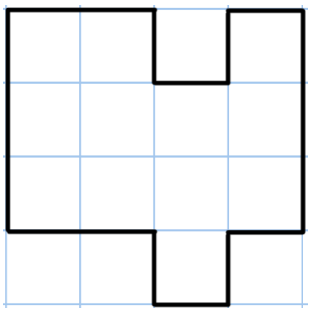
b) 

c) 

2. Calculate the perimeter of these shapes:

a) 

b) 

c) 

3. Write:

a) $\frac{1}{2}$ as a percentage

b) $\frac{3}{4}$ as a decimal

c) 13% as a decimal

d) 30% as a fraction

e) 0.25 as a fraction

f) 0.7 as a percentage

4. Write these fractions in order of size, starting with the smallest:

0.5, 0.49, 0.6, 0.552, 0.56, 0.507

Solutions:

1. a) $12cm^2$ b) $9cm^2$ c) $11cm^2$

2. a) 12cm b) 12cm c) 18cm

3. a) 50% b) 0.75 c) 0.13 d) 0.3
   e) $\frac{1}{4}$ f) 70%

4. 0.49, 0.5, 0.507, 0.552, 0.56, 0.6

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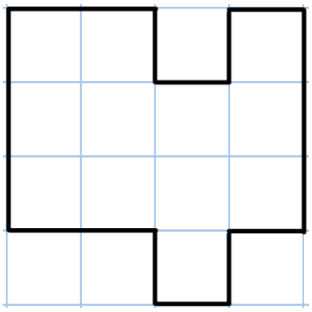
Percentages

Questions:

1. Write as a percentage:
   a) 37 out of 50 b) 19 out of 20 c) 3 out of 5

2. Write as a fraction in its simplest form:
   a) 60% b) 25% c) 35% d) 10%

3. Write the area of these shapes:
   a) 
   b) 
   c) 

4. Write the first five multiples of:
   a) 5 b) 3 c) 8 d) 12

5. Calculate:
   a) 215 + 33 b) 3157 + 239 c) 867 + 3575

Solutions:

1. a) 74% b) 95% c) 60%

2. a) $\frac{60}{100} = \frac{3}{5}$ b) $\frac{25}{100} = \frac{1}{4}$ c) $\frac{35}{100} = \frac{7}{20}$ d) $\frac{10}{100} = \frac{1}{10}$

3. a) $8cm^2$ b) $5cm^2$ c) $12cm^2$

4. a) 5, 10, 15, 20, 25 b) 3, 6, 9, 12, 15
   c) 8, 16, 24, 32, 40 d) 12, 24, 36, 48, 60

5. a) 248 b) 3396 c) 4442

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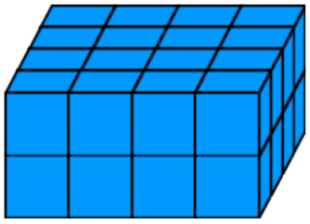
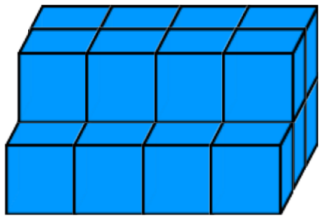
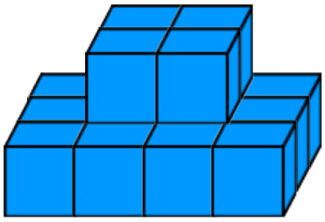
Volume

Questions:

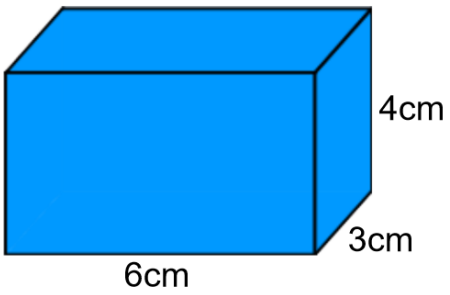
1. By counting centimetre-cubes, what is the volume of these solids?

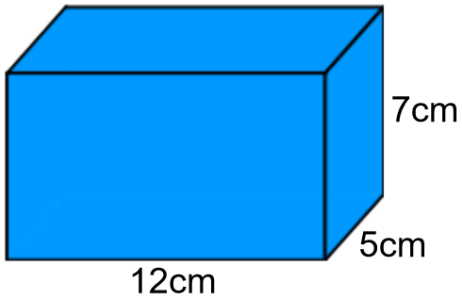
a) 

b) 

c) 

2. Calculate the volume of these cuboids:

a) 

b) 

3. Write as a fraction in its simplest form:

a) 50% b) 20% c) 10% d) 35%

4. Write all the factors of:

a) 20 b) 30 c) 28

5. Work out:

a) 285 – 53 b) 3285 – 158 c) 4500 - 2678

Solutions:

1. a) $32cm^3$ b) $20cm^3$ c) $16cm^3$

2. a) $72cm^3$ b) $420cm^3$

3. a) $\frac{50}{100} = \frac{1}{2}$ b) $\frac{20}{100} = \frac{1}{5}$ c) $\frac{10}{100} = \frac{1}{10}$ d) $\frac{35}{100} = \frac{7}{20}$

4. a) 1, 2, 4, 5, 10, 20 b) 1, 2, 3, 5, 6, 10, 15, 30
   c) 1, 2, 4, 7, 14, 28

5. a) 232 b) 3127 c) 1822

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Percentages of Amounts

Questions:

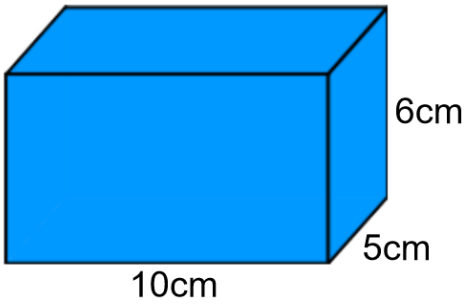
1. Work out:

a) 50% of 160 b) 25% of 120 c) 10% of 180

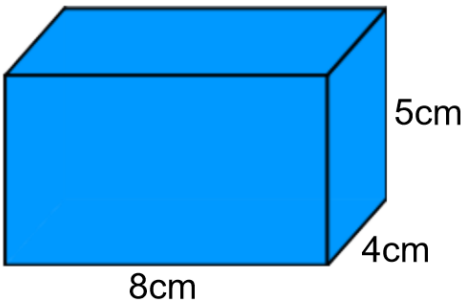
d) 5% of 180 e) 30% of 120 f) 10% of 175

2. Calculate the volume of these cuboids:

a)



b)



3. Convert:

a) 3 kilometres to metres b) 700 centimetres to metres

c) 5 litres to millilitres d) 350 centimetres to metres

e) 3.5 kilograms to grams f) 85 millimetres to centimetres

4. Work out:

a) 3 × 4 b) 7 × 2 c) 20 ÷ 5 d) 4 × 10

e) 4 × 9 f) 24 ÷ 8 g) 55 ÷ 11 h) 3 × 7

i) 6 × 9 j) 5 × 12 k) 18 ÷ 1 l) 14 × 3

Solutions:

1. a) 80 b) 30 c) 18 d) 9
   e) 36 f) 17.5

2. a) 300cm^3 b) 160cm^3

3. a) 3000metres b) 7 metres c) 5000 millilitres
   d) 3.5 metres e) 3500 grams f) 8.5 centimetres

4. a) 12 b) 14 c) 4 d) 40
   e) 36 f) 3 g) 5 h) 21
   i) 54 j) 60 k) 18 l) 42

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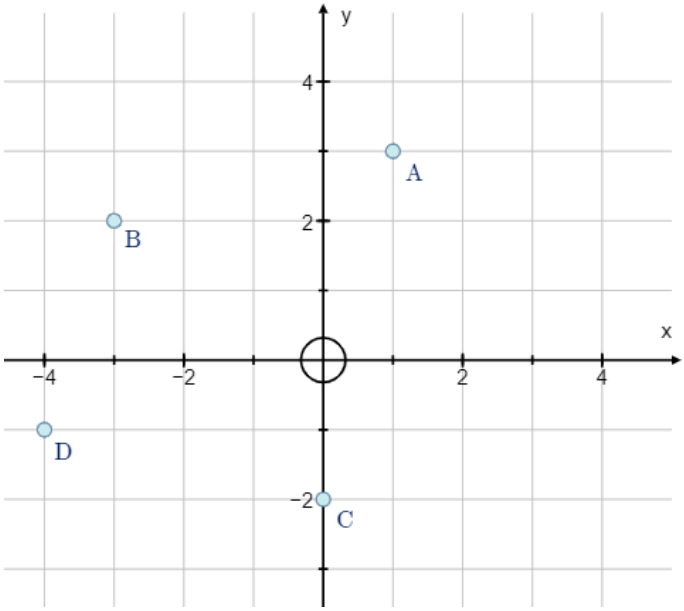
Coordinates in Four Quadrants

Questions:

1. Write the coordinates of the points A, B, C and D:



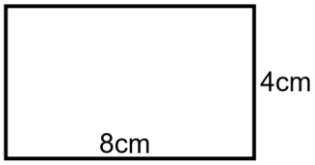
2. Work out:

a) 50% of 80 b) 10% of 80 c) 5% of 80

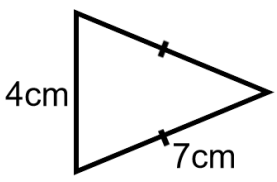
d) 10% of 60 e) 20% of 60 f) 70% of 60

3. Write the perimeter of these shapes:

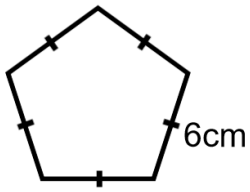
a)



b)

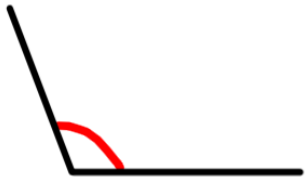


c)



4. Describe these angles:

a)



b)

c)

Solutions:

1. A (1, 3) B (-3, 2) C (0, -2) D (-4, -1)

2. a) 40 b) 8 c) 4 d) 6
   e) 12 f) 42

3. a) 24cm b) 18cm c) 30cm

4. a) obtuse b) right angle c) reflex