

**Have a go at these arithmetic calculations.**

$$1. \quad 4 \times 3 \times 10 =$$

$$2. \quad 63 + 276 =$$

$$3. \quad 430,010 = 400,000 + \boxed{\phantom{000}} + 10$$

$$4. \quad 666 \div 18 =$$



# What are we doing?

- We are going to cover a range of topics we have studied from the Maths curriculum this year.
- Give yourself 4 minutes to work independently on each section. You can then mark your work to see how you got on (if you finish before 4 minutes - go on to marking).
- There will be no extra task at the end of this presentation as you will be doing tasks throughout.

Good luck!

# Properties of number

1. What is 16379 rounded to the nearest hundred?
2. What is  $382 \div 100$ ?
3. The temperature in Iver was  $7^{\circ}$  and decreased by  $11^{\circ}$  overnight. What is the new temperature?
4. Complete this sequence: 0.35, 0.48, 0.61, 0.74...?
5. Which of the following numbers are 1 less than a multiple of 7: 18 27 48 75 13
6. What is the first prime number after 14?

Answers on next page



# Properties of number

## Answers:

1. 16379 rounded to the nearest hundred = **16400**
2.  $382 \div 100 =$  **3.82**
3. The temperature in Iver was  $7^{\circ}\text{c}$  and decreased by  $11^{\circ}$  overnight. New temperature =  **$-4^{\circ}\text{c}$**
4. Sequence: 0.35, 0.48, 0.61, 0.74, **0.87**
5. Which of the following numbers are 1 less than a multiple of 7: 18 **27** **48** 75 **13**
6. First prime number after 14: **17**



# Fractions, decimals and percentages



1.  $\frac{3}{4}$  is equivalent to  $\frac{\quad}{20}$ ?
2. What is  $\frac{18}{42}$  in its simplest form?
3. Arrange these fractions in ascending order:  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{1}{2}$ ,  $\frac{9}{16}$
4. Change  $\frac{27}{8}$  to a mixed number.
5. Change  $6\frac{7}{11}$  to an improper fraction.
6. Arrange these decimals in ascending order: 1.05, 1.3, 1.21, 1.006
7. What is  $\frac{3}{10}$  as a decimal and a percentage?
8. Find  $\frac{4}{5}$  of 60.
9. Deduct 15% from £42.00
10. Lenny has 3 green marbles to every 4 red marbles. If he has 20 red marbles, how many green marbles does he have?

**Answers on next page**

# Fractions, decimals and percentages



## Answers:

1.  $\frac{3}{4}$  is equivalent to  $\frac{15}{20}$
2.  $\frac{18}{42}$  in its simplest form is  $\frac{3}{7}$
3. Arrange these fractions in ascending order:  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{1}{2}$ ,  $\frac{9}{16}$   
 $\frac{1}{2}$ ,  $\frac{9}{16}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$
4. Change  $\frac{27}{8}$  to a mixed number  $3\frac{3}{8}$
5. Change  $6\frac{7}{11}$  to an improper fraction.  $\frac{73}{11}$
6. Arrange these decimals in ascending order: 1.05, 1.3, 1.21, 1.006  
 $1.006$ ,  $1.05$ ,  $1.21$ ,  $1.3$
7.  $\frac{3}{10}$  as a decimal is  $0.3$  and as a percentage is  $30\%$
8.  $\frac{4}{5}$  of 60 =  $48$
9. Deduct 15% from £42.00 =  $\pounds 35.70$
10. Lenny has 3 green marbles to every 4 red marbles. If he has 20 red marbles, **he will have 15 green marbles.**

# Addition and Subtraction



1. Sally has £3159 in her bank account. She withdraws £1374. How much is left in the account?
2. What is 1.25 added to 14.6?
3.  $7.1 - ? = 2.8$
4. Find the difference between 729 and 42.6
5. Jon walks for 1.6km. He rests for a few minutes then walks a further 1400m. How far has he travelled?

**Answers on next page**

# Addition and Subtraction

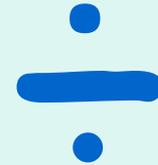


*Answers:*



1. Sally has £3159 in her bank account. She withdraws £1374. How much is left in the account? **£1785**
2. 1.25 added to 14.6 = **15.85**
3. 7.1 - **4.3** = 2.8
4. The difference between 729 and 42.6 is **686.4**
5. Jon walks for 1.6km. He rests for a few minutes then walks a further 1400m. How far has he travelled? **3000m or 3km**

# Multiplication and Division



1.  $15 \times 99 =$

2.  $2.38 \times 3 =$

3. How many 6s are in 456?

4. There are 28 nails in a bag, and 35 bags in a box. How many nails are there in 2 boxes?

5. A bus holds 14 passengers. How many buses are needed for 87 passengers?

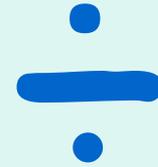
6. What is the product of 1574 and 8?

**Answers on next page**

# Multiplication and Division

Answers:

1.  $15 \times 99 = 1485$



2.  $2.38 \times 3 = 7.14$

3. There are **76** 6s in 456.

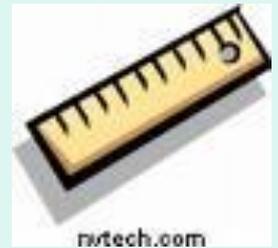
4. There are 28 nails in a bag, and 35 bags in a box. How many nails are there in 2 boxes? **1960 nails in 2 boxes**

5. 87 passengers need **7 buses**.

6. The product of 1574 and 8 is **12,592**



# Measures



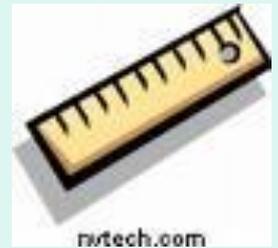
1.  $1.9\text{l} = ? \text{ml}$
2. A ribbon is  $1.8\text{m}$  long.  $136\text{cm}$  is cut off. How long is the ribbon now?
3. I start watching a tv programme at  $7.45$ . It lasts for  $40$  minutes. What time does it finish?
4. What length are the longest sides of a rectangle if the shorter sides are  $8\text{cm}$  and the area is  $72\text{cm}^2$ ?
5. Find the area and perimeter of these rectangles:



**Answers on next page**

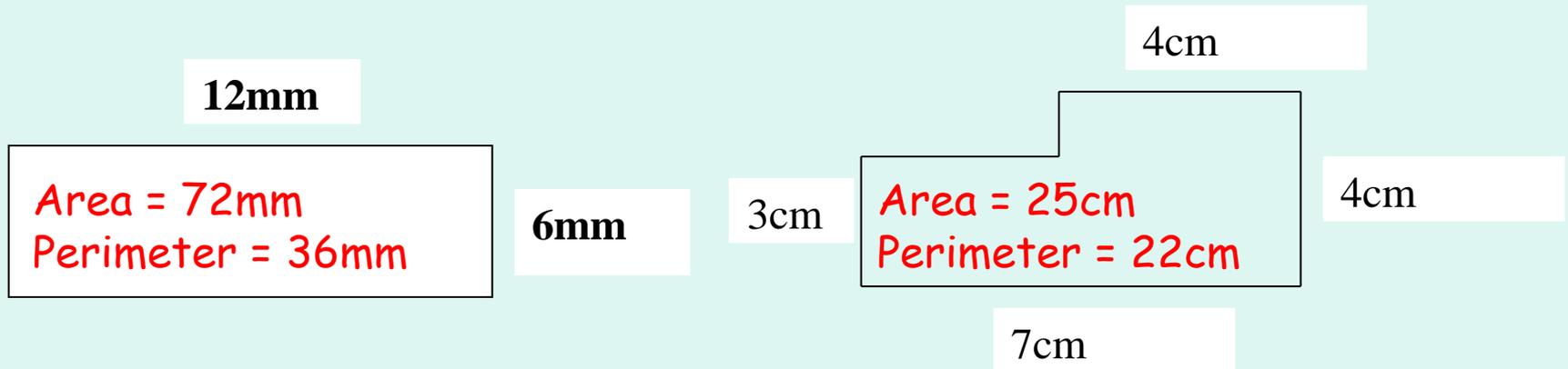


# Measures



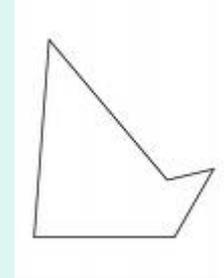
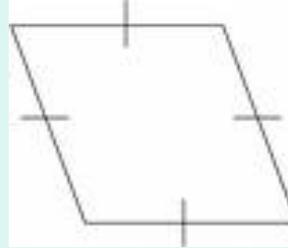
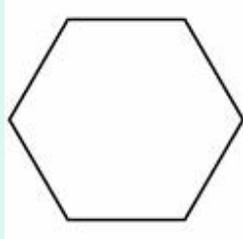
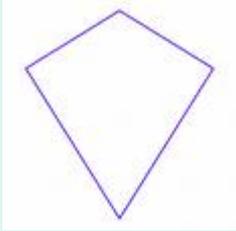
*Answers:*

1.  $1.9\text{l} = 1900\text{ml}$
2. A ribbon is  $1.8\text{m}$  long.  $136\text{cm}$  is cut off. How long is the ribbon now?  $44\text{cm}$
3. I start watching a tv programme at  $7.45$ . It lasts for  $40$  minutes. What time does it finish?  $8.25$
4. What length are the longest sides of a rectangle if the shorter sides are  $8\text{cm}$  and the area is  $72\text{cm}^2$ ?  $9\text{cm}$
5. Find the area and perimeter of these rectangles:

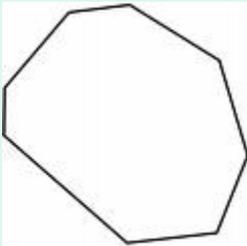


# 2D Shapes

- Which of the following are quadrilaterals?



- What shape is this:



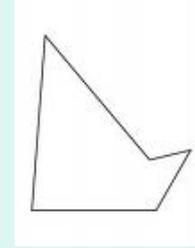
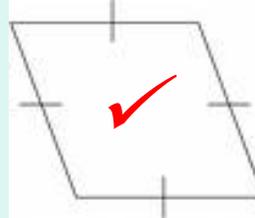
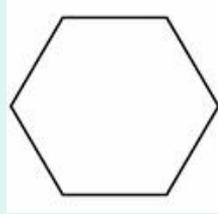
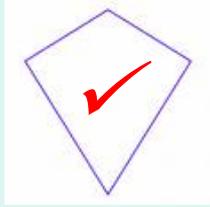
- Describe right angled, isosceles and scalene triangles.
- A coin has a radius of 14mm. What is its diameter?

**Answers on next page**

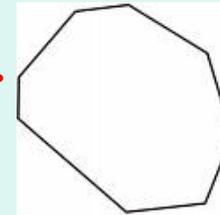
# 2D Shapes

## Answers:

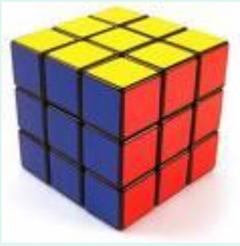
- The ticked shapes are quadrilaterals:



- This shape is an **irregular octagon**.



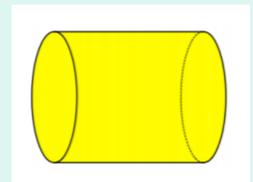
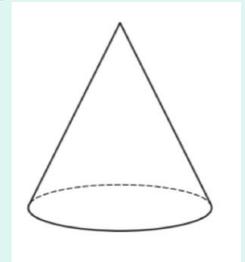
- **Right-angled triangle:** A triangle in which one angle is a right angle.
- **Isosceles triangle:** A triangle with two equal sides. The angles opposite the equal sides are also equal.
- **Scalene triangle:** A triangle with all sides of different lengths and all angles are different.
- Diameter of coin = **28mm**



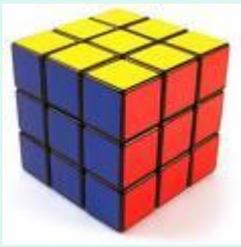
# 3D Shapes



1. How many vertices on a triangular prism?
2. How many faces on a cuboid?
3. How many edges on a square based pyramid?
4. What is the name of this 3D shape?
5. What is the name of this 3D shape?



**Answers on next page**



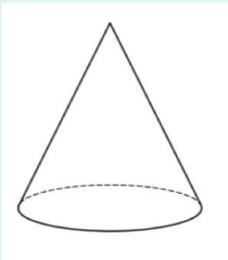
# 3D Shapes



*Answers:*

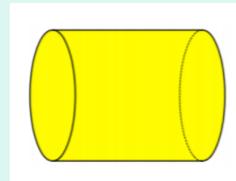
1. There are **6** vertices on a triangular prism.
2. There are **6** faces on a cuboid.
3. There are **8** edges on a square based pyramid.

4.



**Cone**

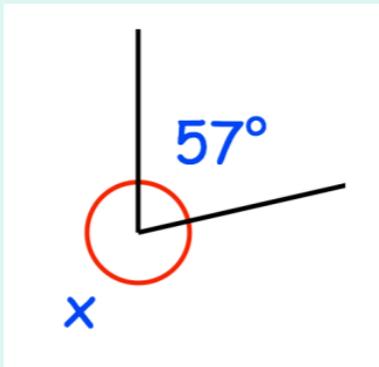
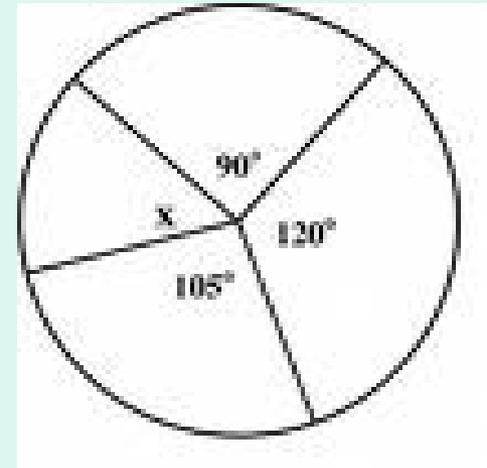
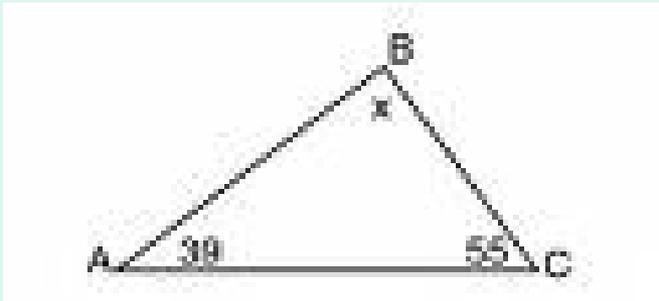
5.



**Cylinder**

# Angles

- Calculate the missing angles:

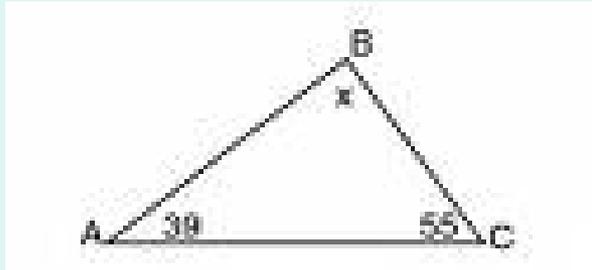


**Answers on next page**

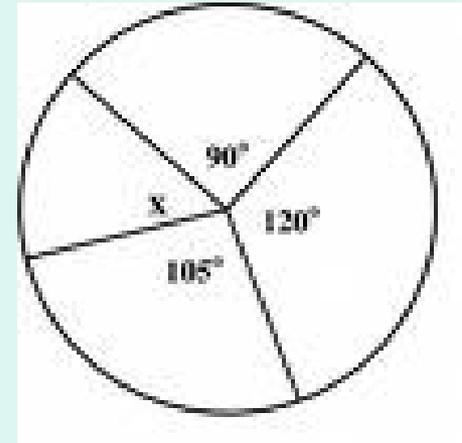
# Angles

*Answers:*

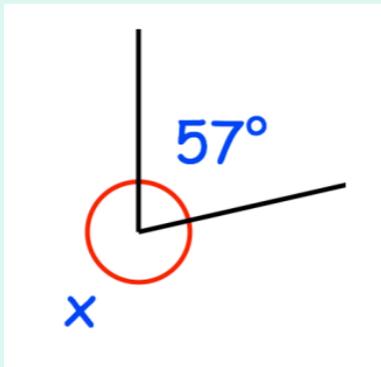
- Calculate the missing angles:



Angle  $x = 86^\circ$



Angle  $x = 45^\circ$



Angle  $x = 33^\circ$

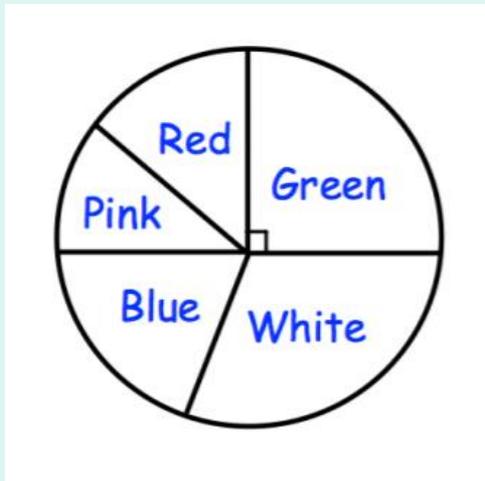


Angle  $x = 153^\circ$

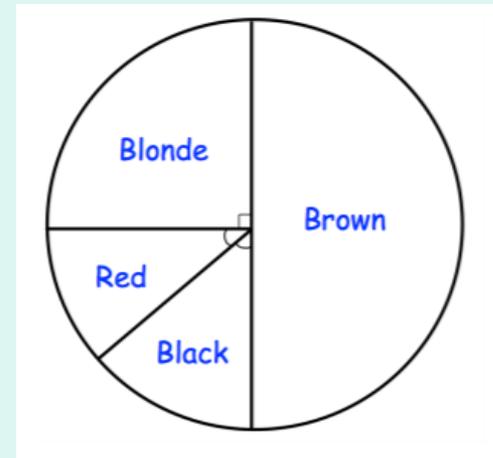
# Statistics

Find the mean of the number of goals scored in netball matches by NSC:

3 1 0 2 3 4 0 1  
2 4 1 5 0 1 3



This pie chart shows the colours of 32 beads. How many beads are green?



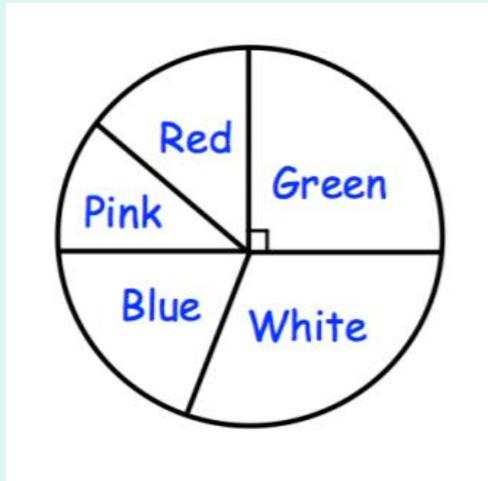
This pie chart shows information about hair colour in a class. There are 24 children in the class. How many children have blonde or brown hair?

**Answers on next page**

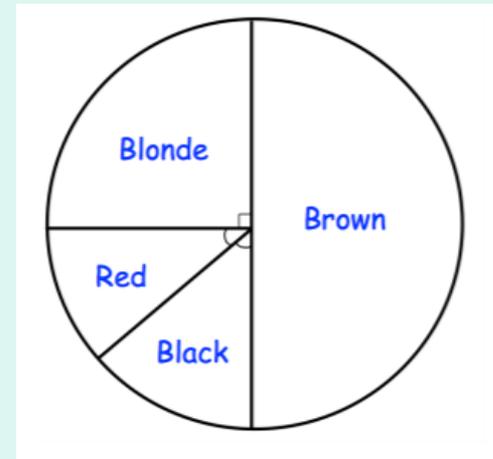
Answers:

# Statistics

The mean of the number of goals scored in netball matches by NSC = 2

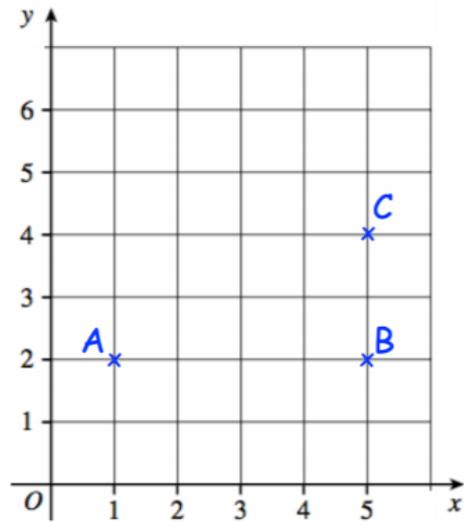


8 beads are green.



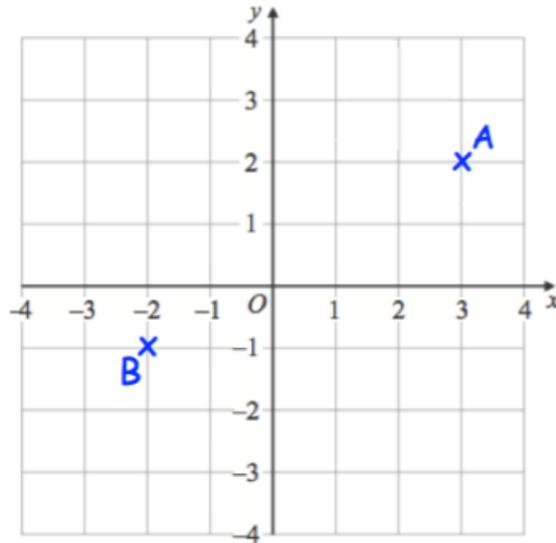
18 children have blonde or brown hair.

# Co-ordinates



A, B, C and D are the vertices of a rectangle. What are the co-ordinates of Point D?

The points **A** and **B** are shown on the grid.



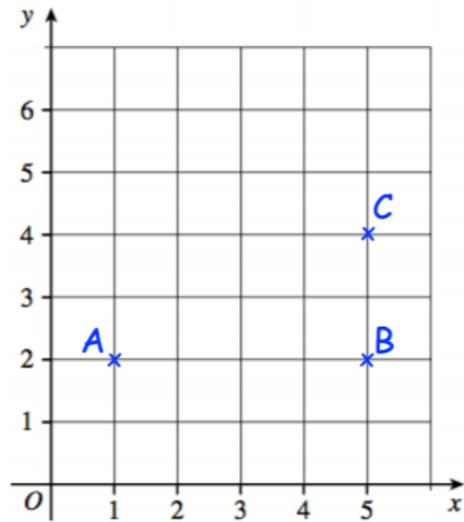
What are the co-ordinates of Point A?

What are the co-ordinates of Point B?

**Answers on next page**

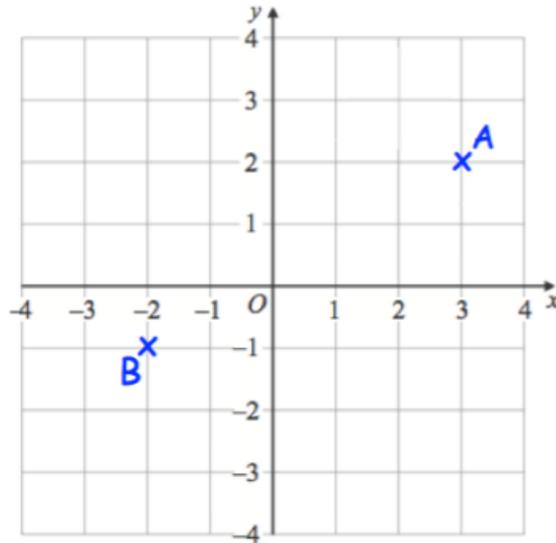
Answers:

# Co-ordinates



Co-ordinates of Point D:  
 $(1, 4)$

The points **A** and **B** are shown on the grid.

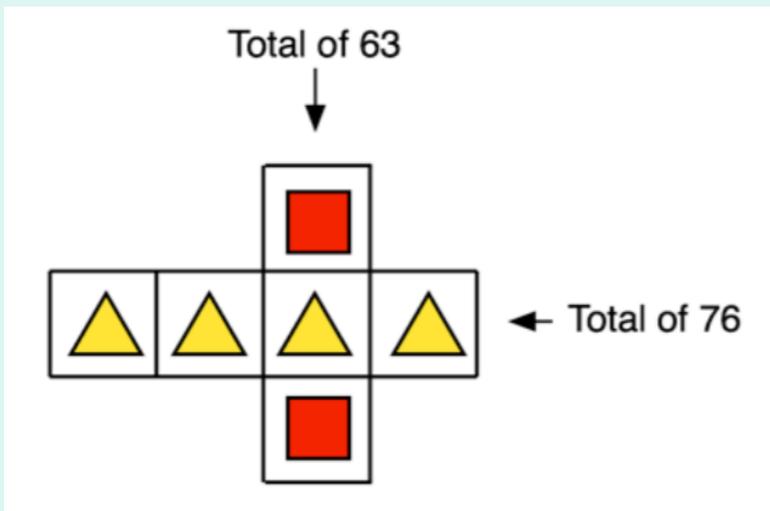


Co-ordinates of Point A:  
 $(3, 2)$

Co-ordinates of Point B:  
 $(-2, -1)$

# Algebra

- 1)  $w + 8 = 13$ . What is the value of  $w$ ?
- 2)  $n - 4 = 6$ . What is the value of  $n$ ?
- 3)  $3y = 24$ . What is the value of  $y$ ?
- 4)  $2c + 6 = 30$ . What is the value of  $c$ ?
- 5)  $4u - 5 = 27$ . What is the value of  $u$ ?
- 6)  $m = 120 - 3c$ . What is the value of  $c$  when  $m = 90$ ?
- 7)



Each shape stands for a number.  
Work out the value of each shape.

**Answers on next page**

Answers:

# Algebra

1)  $w + 8 = 13$ .  $w = 5$

2)  $n - 4 = 6$ .  $n = 10$

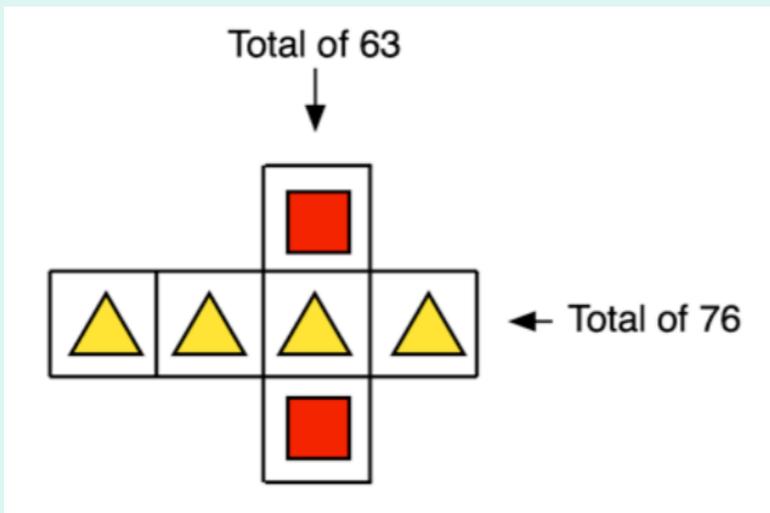
3)  $3y = 24$ .  $y = 8$

4)  $2c + 6 = 30$ .  $c = 12$

5)  $4u - 5 = 27$ .  $u = 8$

6)  $m = 120 - 3c$ . When  $m = 90$ ,  $c = 10$

7)



 = 22

 = 19

# Timetables

Southville	07 04
Leek	07 09
Jamestown	07 38
Lincoln	08 01
Gold City	08 39

This is part of a train timetable.

How long is the journey from Southville to Jamestown?

	Departure times			
Antrim	12:30	13:00	14:00	16:00
Randalstown	12:45	13:15	14:15	16:15
Ballymena	13:01	13:31	14:31	16:31
Ballycastle	13:39	14:09	15:09	17:09

Here is part of a bus timetable. Freddy wants to travel from Randalstown to Ballycastle. He arrives in Randalstown at 13:03. When is the next bus he can catch to Ballycastle? When will he reach Ballycastle?

**Answers on next page**

# Timetables

Answers:

Southville	07 04
Leek	07 09
Jamestown	07 38
Lincoln	08 01
Gold City	08 39

The journey from Southville to Jamestown is **34 minutes long**.

	Departure times			
Antrim	12:30	13:00	14:00	16:00
Randalstown	12:45	13:15	14:15	16:15
Ballymena	13:01	13:31	14:31	16:31
Ballycastle	13:39	14:09	15:09	17:09

The next bus he can catch to Ballycastle is at **13:15**.  
He will reach Ballycastle at **14:09**.

# *Plenary:*

How did you get on?

Go back and look at the areas you either struggled with or made errors with.

These are the areas you should spend some time revising during the Summer holidays in preparation for secondary school.