

**GCSE Maths - Foundation grade C**

**Five questions a day**

**Set 3**

**No calculators!**

## Instructions

Complete one set of questions each day.

Write your answers in the boxes and remember to show your working.

Calculators are NOT allowed!

*Once the answers have been  
marked, record your progress on  
page 8*

Day 1 Probability

1. A bag contains 6 lemon sweets and 8 orange ones.

What is the probability of picking an orange sweet?

2. A drawer contains 12 blue socks and 8 red ones.

What is the probability of not picking red socks?

3. Gemma has a box of red, blue and green pens.

The probability that she chooses a red pen is 0.5

The probability that she chooses a green pen is 0.3

What is the probability that she chooses a blue pen?

4. *Using question 3 ...*

There were 10 pens in the box.

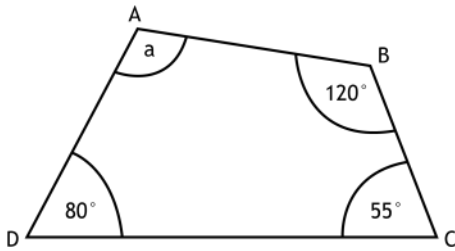
How many pens were red?

5. *Using question 3 ...*

What is the probability of choosing a red or a green pen?

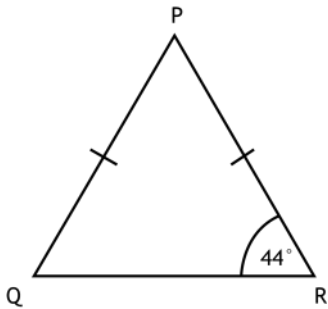
Day 2 Angles

1.



Calculate angle a.

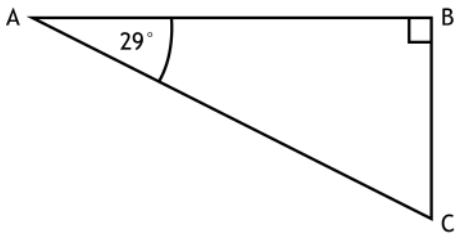
2.



What type of triangle is this?

Calculate the angle at P.

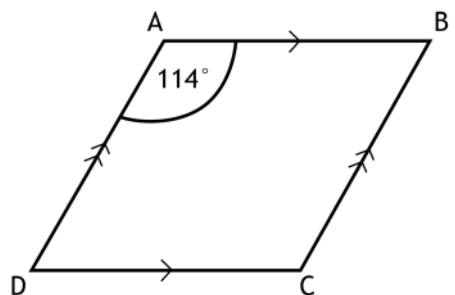
3.



What type of triangle is this?

Calculate the missing angle.

4.



ABCD is a rhombus.

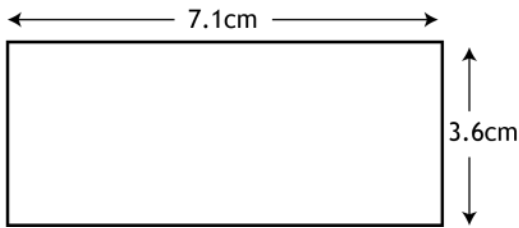
Calculate the angle at D.

5. *Using the shape in Q4 ...*

Calculate the angle at C.

Day 3 Perimeter and area

1.

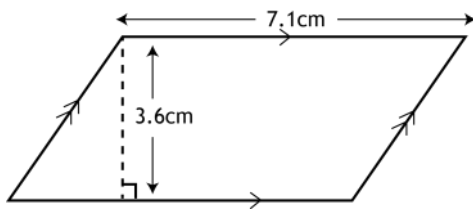


Calculate the area of this rectangle, stating the units.

2. *Using the shape in Q1...*

Calculate the perimeter, stating your units.

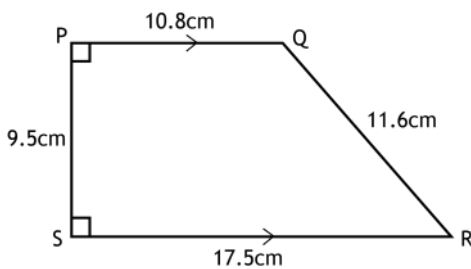
3.



Calculate the area of this shape.

Name this shape.

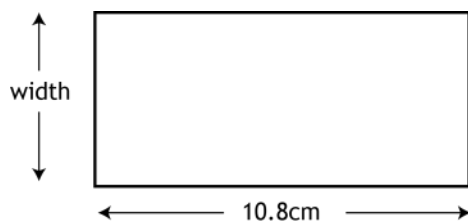
4.



Calculate the area of this shape.  
(You don't need to learn the formula.)

Name this shape.

5.



The perimeter of this rectangle is 28.8cm.

Find the width.

**Day 4      Expressions**

1. Expand:

$$4(a - 2b)$$

2. Expand:

$$2d(d + 3)$$

3. Expand:

$$p^2(3p - 1)$$

4. Expand and simplify:

$$3(2x + 5y) + 4(x - 2y)$$

5. Expand and simplify:

$$7(2x - y) - 3(3x - y)$$

## Day 5      Fractions

1.  $\frac{1}{6} + \frac{3}{4}$

2.  $\frac{4}{5} - \frac{1}{3}$

3.  $\frac{2}{3} = \frac{?}{15}$

4.  $\frac{1}{2} \times \frac{1}{4}$

5.  $\frac{6}{7} \times \frac{14}{15}$

**Progress**

<b>Topic</b>	<b>Score</b>	<b>Traffic light</b>	<b>Comment</b>
<b>Probability</b>			
<b>Angles</b>			
<b>Perimeter and area</b>			
<b>Expressions</b>			
<b>Fractions</b>			



Solutions

Day 1

1.  $\frac{8}{14}$
2.  $\frac{12}{20}$
3. 0.2
4. 5
5. 0.8

Day 2

1.  $105^\circ$
2.  $92^\circ$
3.  $61^\circ$
4.  $66^\circ$
5.  $114^\circ$

Day 3

1.  $25.56\text{cm}^2$
2. 21.4cm
3.  $25.56\text{cm}^2$
4. 268.85
5. 3.6cm

Day 4

1.  $4a - 8b$
2.  $2d^2 + 6d$
3.  $3p^3 - p^2$
4.  $10x + 7y$
5.  $5x - 4y$

Day 5

1.  $\frac{11}{12}$
2.  $\frac{7}{15}$
3.  $\frac{10}{15}$
4.  $\frac{1}{8}$
5.  $\frac{4}{5}$