

Name: \_\_\_\_\_

\_\_\_\_\_

# Top Ten

## Foundation GCSE Yellow - Set 1 Paper 1

|                | Q  | Topic                      | My Mark | Max Marks |
|----------------|----|----------------------------|---------|-----------|
| Non Calculator | 1  | Money calculations         |         | 6         |
|                | 2  | Calculating with fractions |         | 7         |
|                | 3  | Percentages                |         | 4         |
|                | 4  | Ratio                      |         | 4         |
|                | 5  | Algebraic manipulation     |         | 8         |
| Calculator     | 6  | Area and perimeter         |         | 5         |
|                | 7  | Angle facts                |         | 4         |
|                | 8  | Averages from lists        |         | 5         |
|                | 9  | Bar charts                 |         | 5         |
|                | 10 | Probability                |         | 5         |
|                |    |                            |         | 53        |



### Question 1 – Money calculations

Here are the prices of food and drinks in a café.

| Food     |       | Drinks |       |
|----------|-------|--------|-------|
| Pizza    | £1.40 | Tea    | 65p   |
| Burger   | 95p   | Coffee | 90p   |
| Sandwich | £1.20 | Cola   | 80p   |
| Toast    | 90p   | Juice  | £1.00 |

- (a)** Sally buys 2 cups of tea and a coffee.  
How much does she pay in total?

£.....  
[2]

- (b)** Julia buys a sandwich and a juice.  
She pays with a £5 note.  
How much change will she receive?

£.....  
[2]

- (c)** Khadim wants to buy one item of food and one drink.  
What is the least amount of money he could spend?

£.....  
[2]

## Question 2 – Calculating with fractions

- a) Write  $3\frac{2}{5}$  as an improper fraction.

.....  
[1]

Work out the following, giving your answers in their simplest form.

b)  $\frac{5}{6} - \frac{3}{8}$

.....  
[2]

(c)  $\frac{20}{21} \times \frac{7}{10}$

.....  
[2]

(d)  $\frac{3}{7} \div \frac{6}{11}$

.....  
[2]

### **Question 3 – Percentages**

**(a)** Find 55% of 940

.....  
[2]

**(b)** Find 67% of 150

.....  
[2]

#### **Question 4 – Ratio**

**(a)** Write £4.20 : £1.40 : 70p in its simplest form.

.....  
[2]

**(b)** Divide 108 in the ratio 4 : 5

.....  
[2]

### Question 5 - Algebraic manipulation

(a) Simplify:

i.  $7a + b + 8a - 5a$

.....  
[2]

ii.  $p^3 \times p^2$

.....  
[1]

iii.  $m^8 \div m^2$

.....  
[1]

(b) Work out the value of  $4e - 2f$  when  $e = 5$  and  $f = 3$

.....  
[2]

(c) Solve:

$$3x + 7 = 31$$

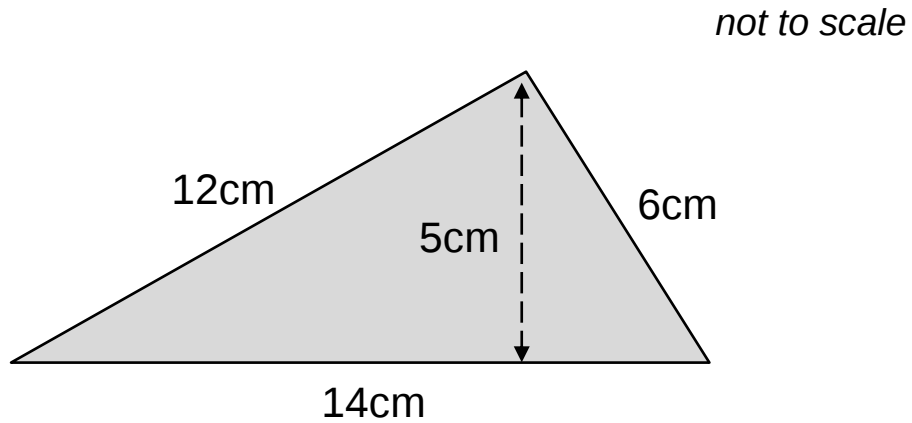
$x =$  .....  
[2]



## Calculator

### Question 6 – Area and perimeter

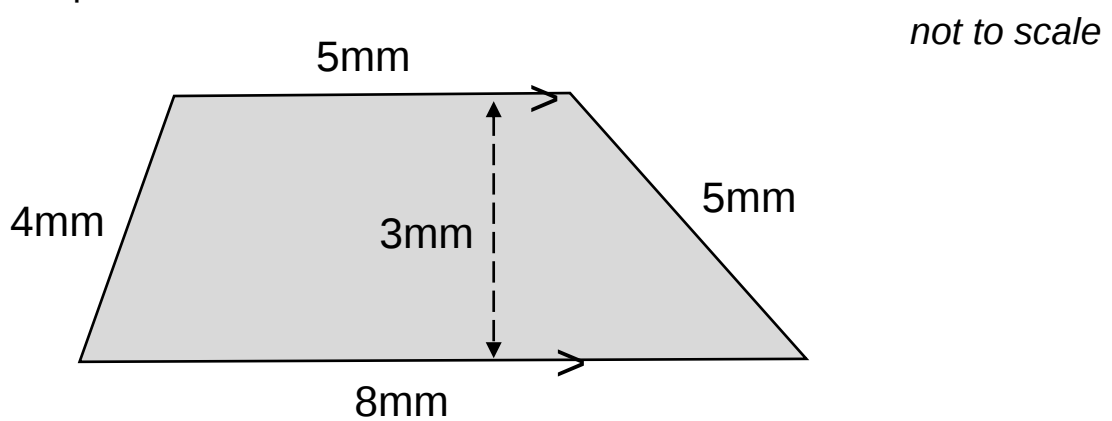
(a) Below is a triangle.



Calculate its area.

.....cm<sup>2</sup>  
[2]

(b) Below is a trapezium.

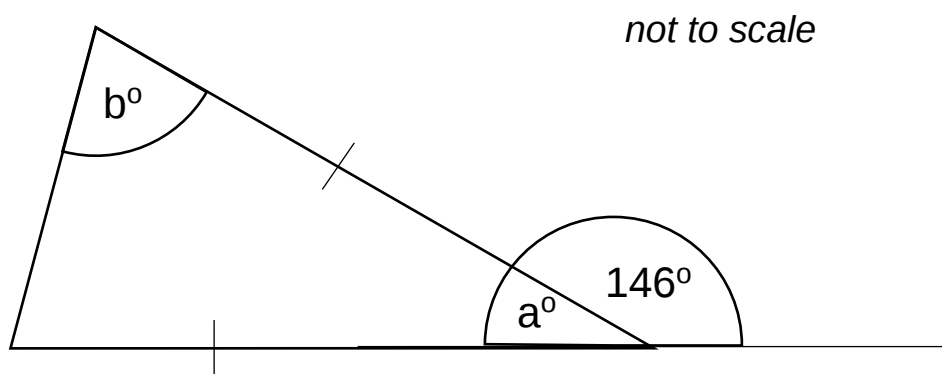


Calculate its area.

.....mm<sup>2</sup>  
[3]

### Question 7 – Angle facts

In the diagram below, find the size of the missing angles.



$$a = \dots\dots\dots^\circ \quad [2]$$

$$b = \dots\dots\dots^\circ \quad [2]$$

### **Question 8 – Averages from lists**

Twelve members of a running club take part in a run.

The data below shows the times taken, in hours, by the 12 runners to complete the run.

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
| 1.2 | 0.9 | 2.5 | 1.3 | 2.1 | 2.6 |
| 1.9 | 2.0 | 2.1 | 2.1 | 1.5 | 2.1 |

- (a)** Write down the modal time taken to complete the run

.....  
[1]

- (b)** Work out the median time taken

.....  
[1]

- (c)** Calculate the mean of the times.  
Give your answer correct to 1 decimal place.

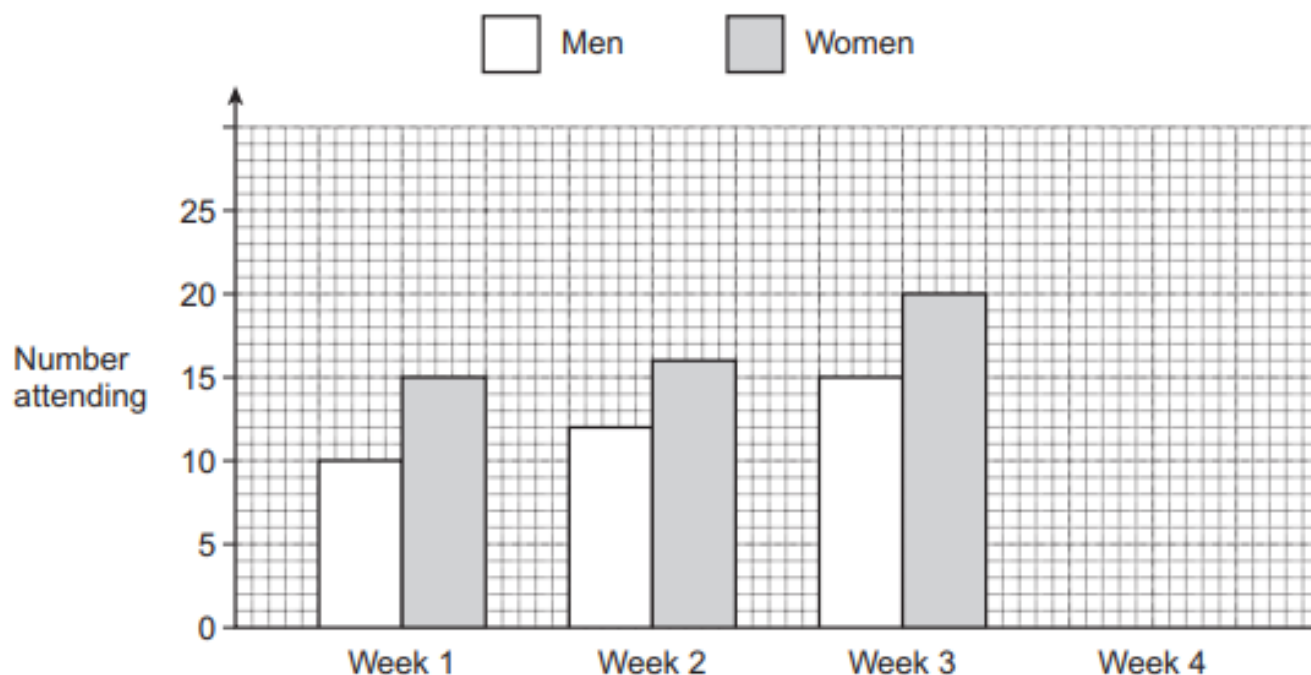
.....  
[2]

- (d)** One of the runner's time was incorrectly recorded.  
They took longer to complete the race than first recorded.  
Could this impact on the mode? Explain.

.....  
.....  
[1]

### Question 9 – Bar charts

Alison records how many men and women attend her fitness class over four weeks. The bar chart shows the information for Weeks 1, 2 and 3.



(a) How many men attended in Week 2?

.....  
[1]

(b) How many people attended in Week 3 altogether?

.....  
[2]

(c) 24 women and 16 men attended the class in Week 4.  
Show this information on the bar chart

[2]

### Question 10 – Probability

Rayna has a fair 4-sided spinner.  
The spinner can land on 3, 5, 7 or 9.

Rayna spins her spinner twice.  
She adds the two numbers together to get the total.

- (a) Complete the table to show the total for each possible outcome.  
One has been done for you.

|             |   | First spin |    |   |   |   |
|-------------|---|------------|----|---|---|---|
|             |   | +          | 3  | 5 | 7 | 9 |
| Second spin | 3 |            |    |   |   |   |
|             | 5 |            |    |   |   |   |
|             | 7 |            | 12 |   |   |   |
|             | 9 |            |    |   |   |   |

[2]

- (b) What is the probability of Rayna's total is:

i. 10

.....  
[1]

ii. Greater than 15

.....  
[1]

iii. A square number

.....  
[1]