

Key stage 3: End of Term Test 5

Name: _____

Teacher: _____



Answer ALL questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

You must NOT use a calculator.

1.

Mary buys three tickets for a theatre show.

Each ticket costs £50

Mary also has to pay a booking fee.

The booking fee is £2.50 per ticket.

Work out the total amount Mary has to pay.

£.....

(Total for Question 1 is 3 marks)



2.

A film starts at 17 50
The film ends at 19 30

(a) How long does the film last?

.....
(2)

Jackie buys some tickets to see the film.
Each ticket costs £4.50
Jackie pays with two £20 notes.

Jackie gets £8.50 change.

(b) How many tickets did Jackie buy?

.....
(3)

(Total for Question 5 is 5 marks)



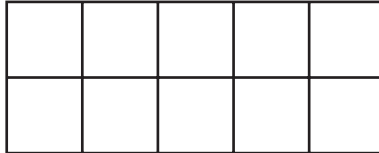
3.



(a) Write down the fraction of this shape that is shaded.

.....
(1)

(b) Shade 30% of this shape.



(1)

(c) Work out $\frac{2}{3}$ of 120 kg.

..... kg

(2)

(Total for Question 7 is 4 marks)



4.

Here are the first five terms of a number sequence.

40 37 34 31 28

(a) (i) Write down the next two terms of this number sequence.

.....,

(ii) Explain how you got your answer.

.....
.....

(2)

Here are the first five terms of a different number sequence.

-12 -7 -2 3 8

(b) Find the 8th term of this sequence.

.....
(2)

(Total for Question 6 is 4 marks)



5.

(a) Work out $15 \div 5 + 7$

.....
(1)

(b) Work out $2 + 7 \times 2$

.....
(1)

(c) Work out $-5 + -6$

.....
(1)

(d) Work out $14 - -3$

.....
(1)

(e) Add brackets () to make this statement correct.

$$12 - 2 \times 3 + 1 = 4$$

(1)

(f) Why does $\frac{1}{4} = \frac{2}{8}$?

(1)

(Total for Question 8 is 6 marks)



6.

(a) Simplify $b + b + b + b$

.....
(1)

(b) Simplify $8n - 3n$

.....
(1)

(c) Simplify $3 \times c \times d$

.....
(1)

(d) Simplify $3x + 7y + 2x - y$

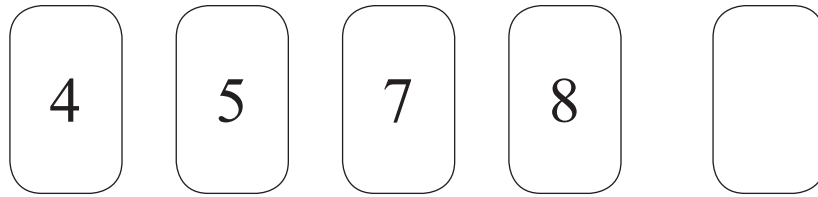
.....
(2)

(Total for Question 11 is 5 marks)



7.

Here are five cards.



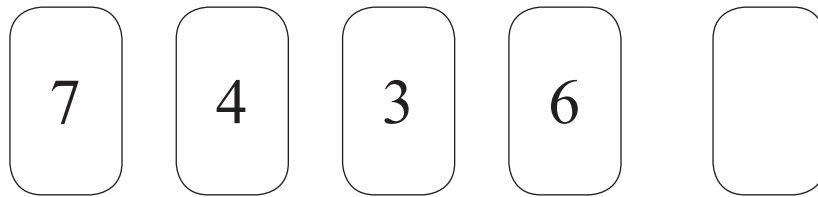
There is a whole number from 0 to 9 on each card.
The number on the last card is hidden.

The range of the five numbers is 6

(a) Write down the whole number on the last card.

.....
(1)

Here is a different set of five cards.



There is a different whole number from 0 to 9 on each card.
The number on the last card is hidden.

The median of the numbers on the five cards is 4

(b) Which whole numbers could be on the last card?

.....
(2)

(Total for Question 12 is 3 marks)



8.

Jessica thinks of a number.

She multiplies the number by 3

She then subtracts 7

Her answer is 5

What number did Jessica think of?

.....
(Total for Question 13 is 2 marks)



9.

(a) Measure the length of the line PQ .

Give your answer in centimetres.



..... cm
(1)

(b)

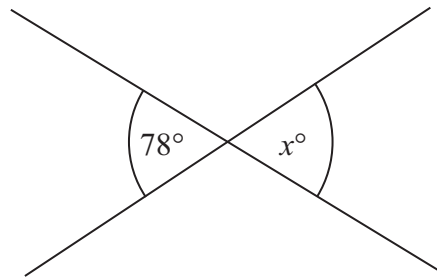


Diagram **NOT**
accurately drawn

(i) Write down the value of x .

$x =$

(ii) Give a reason for your answer.

.....
.....
(2)

(Total for Question 14 is 3 marks)



10.

Aleena is planning a trip for people at her Youth Club.

Here are the costs for the trip.

Transport	£230
Insurance	£50
Other costs	£30
Entry fee	£14 per person

Aleena charges £18 per ticket for the trip.

She sells 100 tickets.

Is there enough money from the ticket sales for Aleena to pay all the costs for the trip?
You must show your working.

(Total for Question 15 is 4 marks)



11.

On Monday Ravi drives for 4 hours.
His average speed is 30 mph.

(a) How far does Ravi drive on Monday?

..... miles
(2)

On Tuesday Ravi drives 200 km.

5 miles = 8 kilometres.

*(b) On which day did Ravi drive further?

(3)

(Total for Question 18 is 5 marks)

12.

(a) Solve $\frac{n}{7} = 2$

.....
(1)

(b) Solve $3g + 4 = 19$

.....
(2)

(Total for Question 19 is 3 marks)



13.

Here is a rule for working out the area of a triangle.

Multiply the base by the height.
Then divide by 2

A triangle has a base of 12 cm and a height of 6 cm.

(a) Use the rule to work out the area of the triangle.

..... cm²
(2)

A different triangle has an area of 55 cm².
It has a height of 11 cm.

(b) Work out the base of this triangle.

..... cm
(2)

(Total for Question 22 is 4 marks)



14.

Rita is going to make some cheeseburgers for a party.
She buys some packets of cheese slices and some boxes of burgers.

There are 20 cheese slices in each packet.
There are 12 burgers in each box.

Rita buys exactly the same number of cheese slices and burgers.

(i) How many packets of cheese slices and how many boxes of burgers does she buy?

..... packets of cheese slices

..... boxes of burgers

Rita wants to put one cheese slice and one burger into each bread roll.
She wants to use all the cheese slices and all the burgers.

(ii) How many bread rolls does Rita need?

..... bread rolls

(Total for Question 27 is 4 marks)



15.

The diagram shows the floor of a village hall.

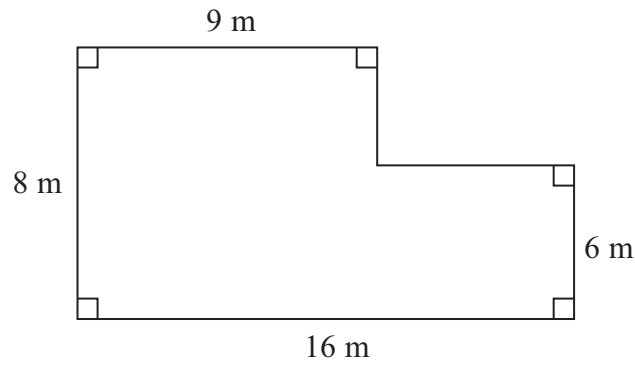


Diagram **NOT**
accurately drawn

The caretaker needs to polish the floor.

One tin of polish normally costs £19

One tin of polish covers 12 m^2 of floor.

There is a discount of 30% off the cost of the polish.

The caretaker has £130

Has the caretaker got enough money to buy the polish for the floor?

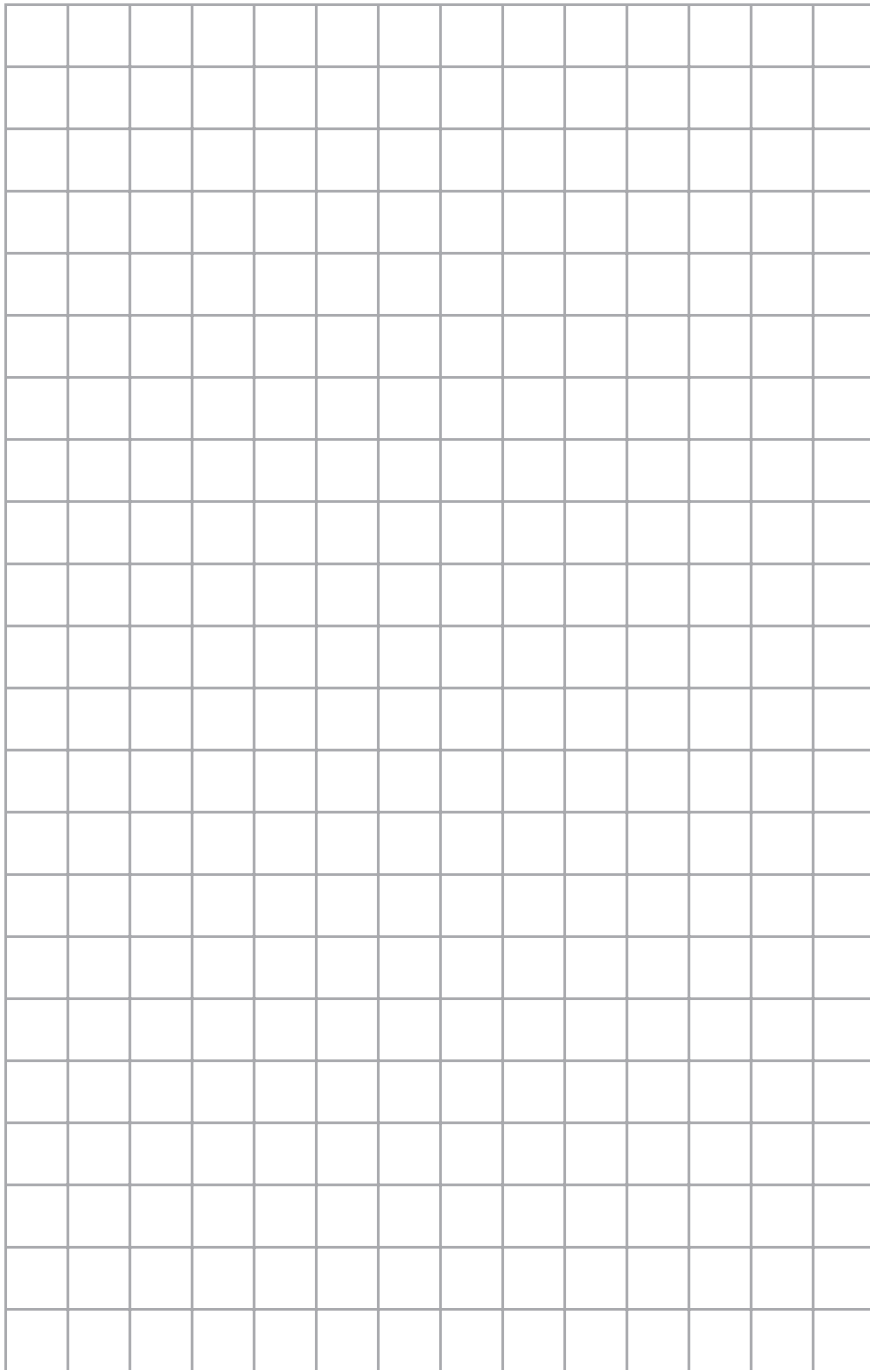
You must show all your working.

(Total for Question 24 is 5 marks)



16.

On the grid, draw the graph of $y = 3x + 2$ for values of x from -2 to 2



(Total for Question 26 is 4 marks)

