FSCE STYLE
Entrance Test
for Entry into Year 7

MOCK 2 PAPER 3

Name: _____

Primary School: _____

Test Date: _____

40 minutes

Each section is timed separately.

Read the instructions at the start of each section.

You must NOT open this booklet until you are told to do so.

Section 1: Multiple Choice

Instructions

Read each question carefully.

You can use the space after each question for working out, but you will not get any marks for your working out.

Answer by shading one of the ovals **A–D** on your answer sheet.

There is only **one** correct answer.

Shade only **one** oval for each question.

Example

i	Which number is a multiple of both 4 and 9?

A   18

B   24

C   32

D   36

The correct answer is **D**.

You have **20 minutes** for this section.

There are **25 questions** to answer.

Section 1: Multiple Choice

1. What is ⅓ of 2 ½?

    A   5/6

    B   ⅓

    C   1 ¼

    D   4/7

2. A book costs £6.80. If you buy three copies, how much change would you get from £25?

    A   £20.40

    B   £3.20

    C   £4.60

    D   £5.20

3. There are 36 apples in a basket. ⅓ of the apples are green and the rest are red. How many apples are red?

    A   18

    B   24

    C   30

    D   12

4. Alice has 3 times as many apples as Bob. Together, they have 48 apples. How many apples does Bob have?

    A   12

    B   16

    C   18

    D   14

Section 1: Multiple Choice

5. What is the next prime number after 17?

A 18

B 19

C 21

D 23

6. What is the value of x in 7x + 4 = 32?

A 3

B 4

C 5

D 6

7. Calculate the value of $5^2 + 3^2$.

A 22

B 16

C 25

D 34

8. Which is the largest number?

0.45   ¾   ⅓   0.5

A 0.45

B ¾

C ⅓

D 0.5

Section 1: Multiple Choice

9. 400 people visit a park. 45% are children. How many are children?

A 160

B 180

C 150

D 200

10. A pool is in the shape of a rectangular prism with a length of 12 metres, a width of 6 metres, and a depth of 2 metres. What is the capacity of the pool in cubic metres?
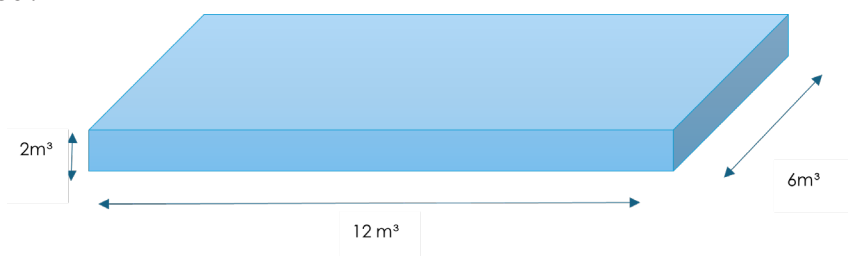
A 144m³

B 150m³

C 180m³

D 120m³

11. **Use this table of information to answer questions 11 & 12.**

A stationary shop offers the following prices for their products:

Pack of 3 pens	Pencils	Pack of 5 highlighters	Pack of 4 rubbers
£1.20	25p each	£3.50	£1.60

What will it cost to buy 12 pens, 10 pencils, and 5 highlighters?

A £9.40

B £10.00
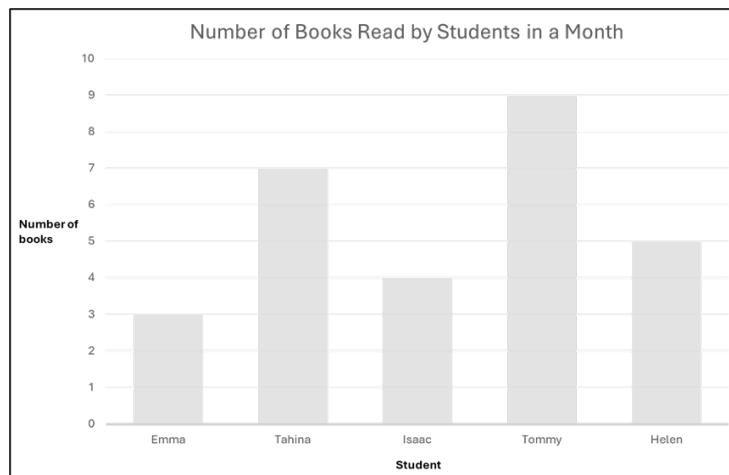
C £10.80

D £9.80

Section 1: Multiple Choice

12. Which item is best value for money per unit?

    A   Pen

    B   Pencil

    C   Highlighter

    D   Rubber

13. Calculate ⅜ + ½ =

    A   ⅞

    B   ¾

    C   ⅔

    D   1

The graph below shows the number of books read in a month by a group of students. Use the graph to answer questions 14 – 16.

Number of Books Read by Students in a Month

14. What is the range of the number of books read by the students?

    A   5

    B   6

    C   7

    D   8

Section 1: Multiple Choice

15.	What is the mean number of books read by the students?

    A   4.8

    B   5.2

    C   5.6

    D   6.0

16.	How many more books did Tahina read than Isaac?

    A   3

    B   4

    C   5

    D   6

17.	Calculate 6.8 ×9.5 =

    A   65.2

    B   64.6

    C   62.2

    D   60.8

18.	Find 35% of 160.

    A   48

    B   56

    C   8

    D   16

Section 1: Multiple Choice

19. Sophie wants to buy 3 books. The first book costs two pounds less that the second book, and the third book costs a pound more that the first book. The second book costs £8. How much does the third book cost?

    A   £1

    B   £3

    C   £8

    D   £7

20. A train travels at a speed of 60 km/h. How far will it travel in 3.5 hours?

    A   210km

    B   200km

    C   180km

    D   240km

21. A piece of ribbon is 5 metres long. If it is cut into pieces that are each 25 cm long, how many pieces can be made?

    A   20

    B   10

    C   15

    D   25

22. The perimeter of a rectangle is 36 cm. If the length is 10 cm, what is the width?

    A   8cm

    B   6cm

    C   4cm

    D   3cm

Section 1: Multiple Choice

23. I think of a number. I double my number and then add 25. The final result is 93. What was the number I started with?

A 44

B 38

C 40

D 34

24. Let A = 6 and C = 10.

If $A^2 + B^2 = C^2$, what is the value of B?

A 6

B 7

C 8

D 9

25. Mr. Green's class recorded the number of different genres of books they read in a month. The genre of books and the number of each read are shown below:

Fiction	Non-Fiction	Mystery	Fantasy
40	25	15	20

What percentage of the books were fiction?

A 12%

B 50%

C 64%

D 40%

Section 2: Free Response

Instructions

Read each question carefully.

You can use the space after each question for working out, but you will not get any marks for your working out.

Write your answers on your answer sheet by writing **one** number in each box.

Example

i	If one pencil costs 85p, how much would it cost to buy 6 pencils?

The correct answer is **£5.10.**

You have **20 minutes** for this section.

There are **20 questions** to answer.

Section 2: Free Response

1. What number replaces the question mark to make the calculation correct?

420 − (64 − 32) = (160 × ?) + 68

2. A room is 4cm long on a plan. The scale is 1cm to 2m. What is the real length of the room?

3. A spinner has 10 equal sections numbered 1 –10. What is the probability of landing on a number less than 5? Give your answer as a fraction.

4. A dice is rolled 90 times. How many times would you expect a 6?

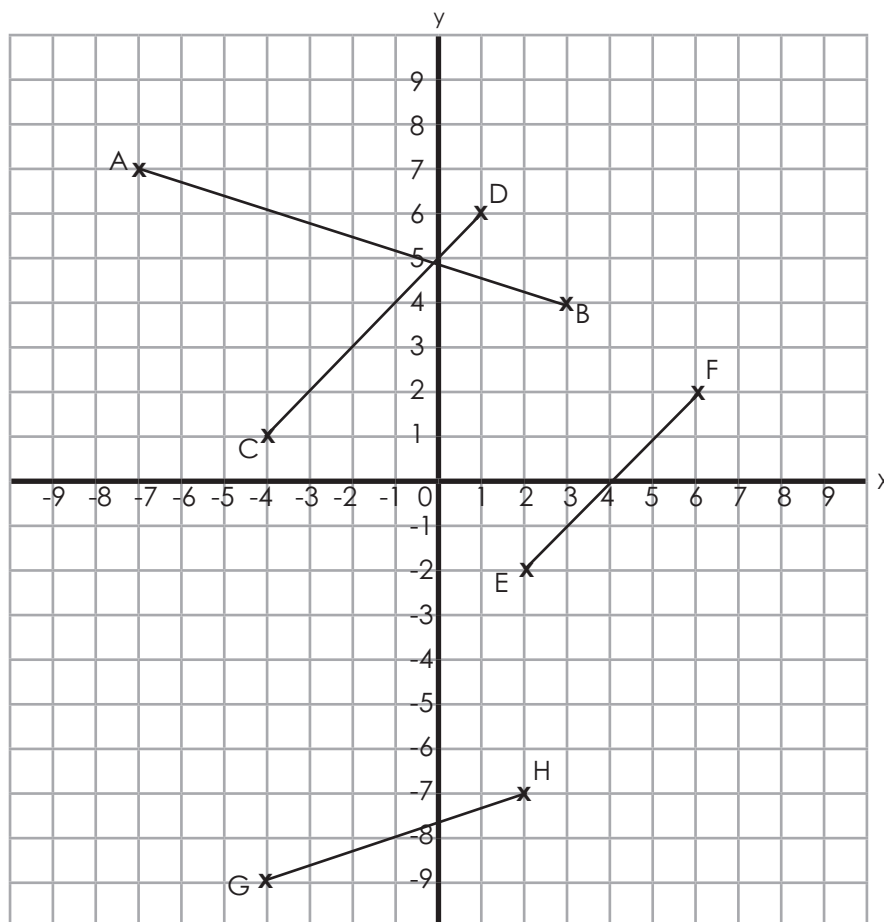**5.** A rectangle has sides of 12cm and 9cm. What is the area of the rectangle?

6. A triangle has a base of 10cm and height of 7cm. What is the area of the triangle?

7. What is the value of x in this equation?

$300 - x = (4^2)^2$

Section 2: Free Response

On the grid below there are four lines with crosses marking the end points. Use this grid to answer questions 8 – 11.

8. What are the coordinates of point C?

9. What are the coordinates of the midpoint of the line EF?

10. Which line is parallel to EF?

11. Mark an X at coordinates (6,-2) and label this point I. Join the lines from E to F, F to I and I back to E to create a triangle. What is the area of this triangle in square units?

Section 2: Free Response

The graph below shows the number of books read by students over the summer holidays.

Use the graph below to answer questions 12 – 14.

A graph to show the number of books read by students over the summer holidays

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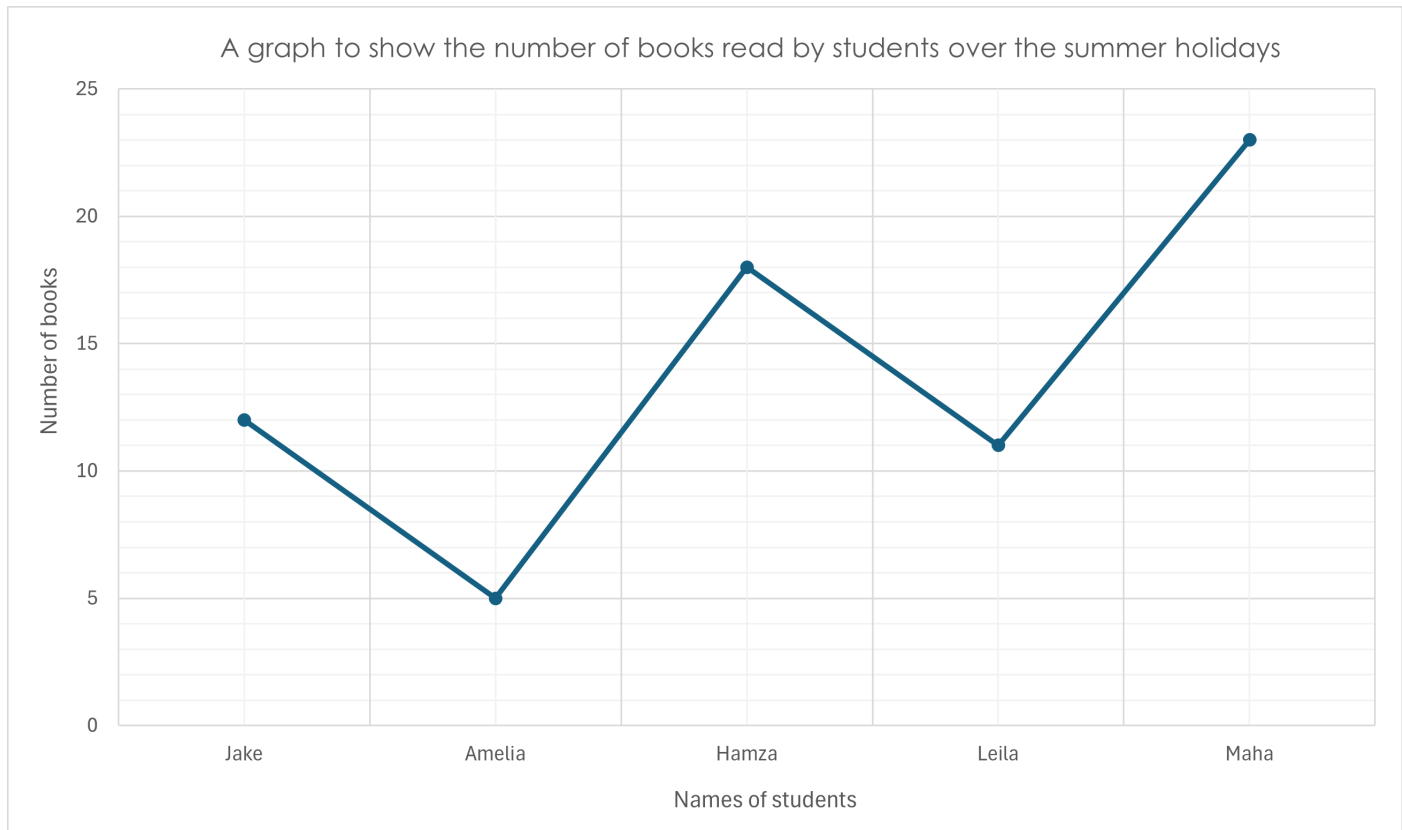
12. How many books were read by the two students who read the most?

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13. How many more books did Hamza read than Amelia?

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14. How many books were read in total?

Section 2: Free Response

15. Temperatures in a city fell from 3°C to –6°c overnight. What was the change in temperature?

16. In a number sequence, each term increases by 4. The second term is 5. What is the 8th term?

17. What is the highest common factor of 16 and 28?

18. Let A = 2   B = 3   C = 4   D = 5

$(D \times B^3) \div (A + B)$

19. Alice has 3 times as many apples as Bob. Together, they have 48 apples. How many apples does Bob have?

20. ⅝ of a number N is 75. What is ¼ of N?

END OF PAPER 3