DOWNSIDE
SCHOOL

DOWNSIDE SCHOOL MATHEMATICS DEPARTMENT

11+ Entrance Examination

SPECIMEN PAPER B

Time Allowed: 1 hour

Name: _____

- Answer all questions in this paper.
- Try to get correct solutions rather than hurrying.
- You may **NOT** use a calculator throughout the paper.
- It is important that you demonstrate every stage of your working.

1 Calculate the answers to the following sums:

(a)
```
  2 7 9 2
  5 2 4 8 +
 ---------
 ---------
```

(b)
```
  3 7 8 4
  1 9 7 5 -
 ---------
 ---------
```

(c)
```
  3 9 7 4
        7 X
 ---------
 ---------
```

(d)
```
  6 7 6 8
        8 ÷
 ---------
 ---------
```

(e)
```
    6 8 3
    8 3 X
 ---------
 ---------
```

(f)
```
  1 9 5 7 3
      2 3 ÷
 ---------
 ---------
```

Space for additional working:

2 Fill in the blank squares with a number to make these sums correct:

(a) 3 8 6 3 + ☐ = 1 2 9 3 7

(b) ☐ X 7 = 5 8 9 8 2

(c) (1 2 X 4) + ☐ = 9 9

3 David thinks of a number. He divides this number by 5 and then adds 21.
His answer is 41. What was his original number?

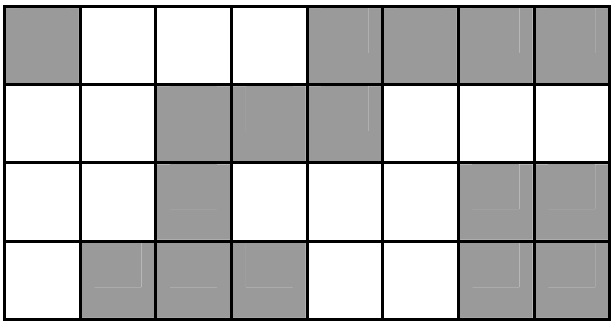
Answer: _____

4 An isosceles triangle has a perimeter of 30 cm. One of the sides is 12 cm. What are the lengths of the other two sides (NOTE: there are two possible answers to this)

Answer: _____ cm and _____ cm

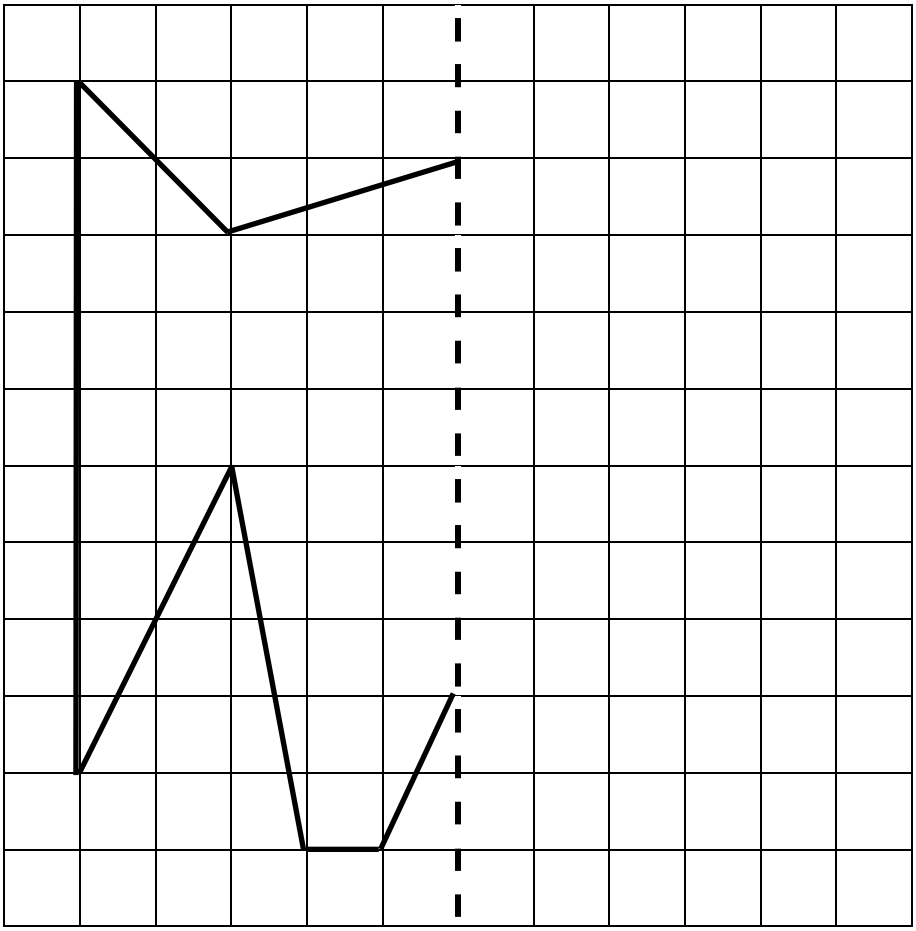
OR: _____ cm and _____ cm

5 What fraction of this square is shaded? Give your answer as a fraction in its lowest terms.

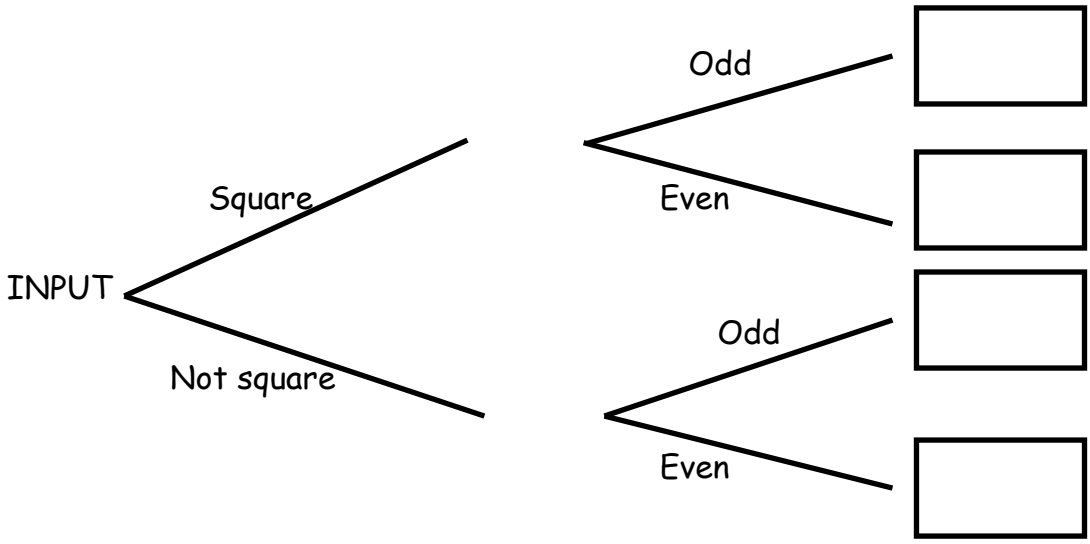


Answer: _____

6 Reflect the shape shown on the grid below across the mirror line (shown in bold dashes)



7 Use the sorting diagram below to sort the numbers 14, 15, and 16 – placing each one in one of the boxes at the end. (NOTE: Not every box will be filled in)



8 Add the next two numbers to each of the following sequences, in the boxes provided:

(a) 7 10 13 16 ☐ ☐

(b) 4 5 7 10 ☐ ☐

(c) 22 17 12 7 ☐ ☐

(d) $3\frac{1}{8}$ $6\frac{3}{8}$ $9\frac{5}{8}$ $12\frac{7}{8}$ ☐ ☐

9 Five friends enter two throwing competitions at a fairground – throwing a welly and throwing an egg. Their results are shown in the table below:

	Welly distance (m)	Egg distance (m)
Adam	4.5	7.8
Benjamin	3.7	7.8
Caleb	6.2	7.5
Daniel	3.8	7.1
Ephraim	5.1	8.3

(a) How far did the person who throw the egg the furthest manage to throw his welly?

Answer: _____m

(b) How much further did Daniel throw his egg than he managed to throw his welly?

Answer: _____m

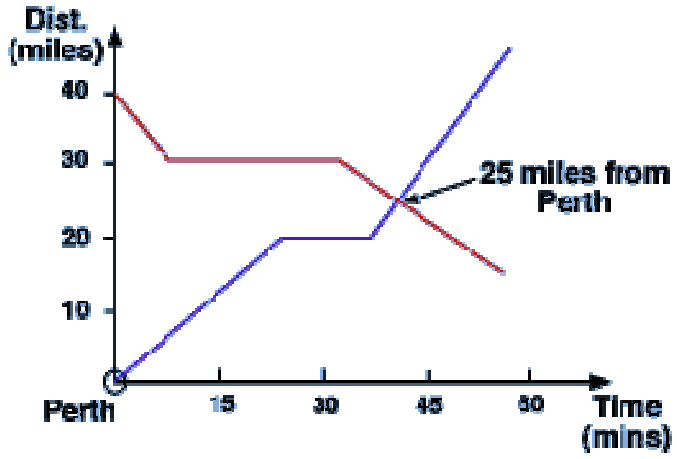
(c) Who threw the two objects furthest, if you add the two totals together?

Answer: _____

(d) How much further did they throw their two objects than the person who was last in total?

Answer: _____m

10 Martin and Paul both leave their homes at the same time. Martin lives in Perth. The distance they are at any time from Perth is shown in the diagram below:



(a) How far does Paul live from Perth?

Answer: _____

(b) If they leave home at 9 a.m. at what time, approximately, are they both the same distance from Perth?

Answer: _____

(c) Which one stops for the longest time on their journey, and for approximately how long do they stop?

Answer: _____

11 Three angles in a trapezium are 141^{O}, 72^{O} and 46^{O}. What is the fourth angle?

Answer: _____

12 Four friends won £1000 in a competition. Martha took one fifth of the money and Mary took a quarter of it. Matthew took £285. How much was left for Mark?

Answer: £_____

13 What is:

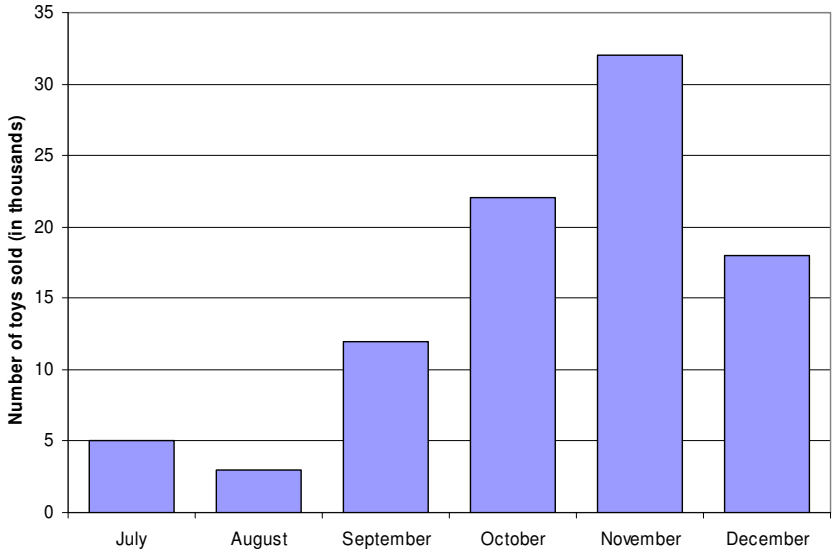
(a) 75% of 480?

Answer: _____

(b) 45% of £380?

Answer: _____

14 A new toy is available for sale, and the numbers sold each month from its release are shown in the bar chart below. The numbers show how many thousand of these toys are sold each month for the first 6 months.



a) Which month had the most sales?

Answer: _____

b) How many more were sold in October than in July?

Answer: _____

c) How many toys were sold in total over these 6 months?

Answer: _____

15 Philip is catching a plane that is due to depart at 10:22 a.m. He is told he must be at the airport at least two and a half hours before his flight.

a) What is the latest time at which he should arrive at the airport?

Answer: _____

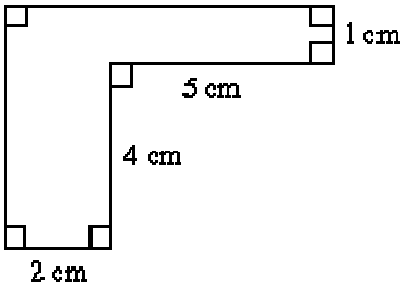
b) His journey from home should normally take 75 minutes. There is an accident on the road that morning which holds him up for 52 minutes. He left home at 6:10 a.m. What time does he arrive at the airport?

Answer: _____

16 50 children want to purchase the special football club of their school. The shirt costs £10, or £15 if you wish to have your name put onto the back. Together the children pay £555. How many of the children paid to have their name put onto the shirts?

Answer: _____

17 Find the area of this shape:



Answer: _____ cm^2

NOW GO BACK AND CHECK THROUGH YOUR WORK CAREFULLY