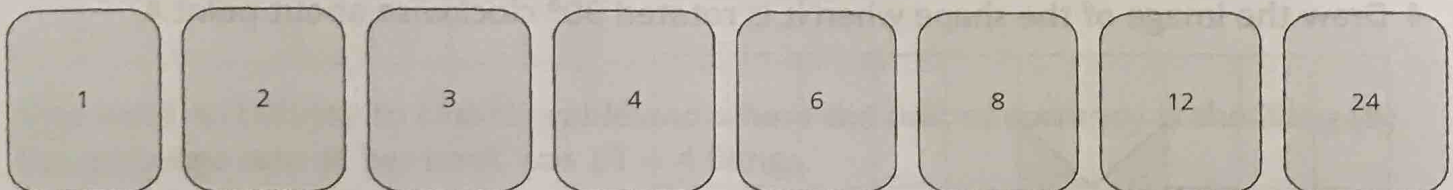


- 1 The children in three Year 6 classes are given a choice of after-school clubs. They can choose to join the swimming club, the running club or the rugby club. Their choices are shown in the table below.

	Swimming club	Running club	Rugby club	Total
Mr Richards' class	12	8		28
Mrs Flynn's class		13	7	30
Mrs Thomas's class	5		9	
Total				85

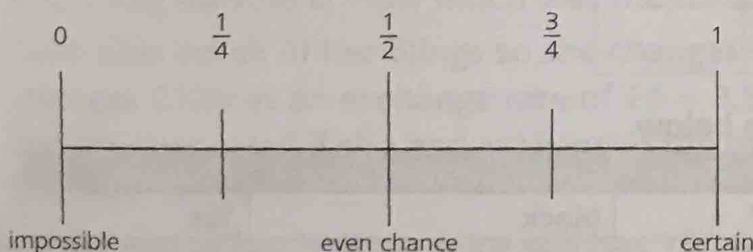
- (a) Complete the table. (4)
- (b) What percentage of the children in Mrs Flynn's class chose the swimming club? _____ (2)
- (c) Last Tuesday, the ratio of children from the swimming club who forgot their swimming kit to those that didn't was 1:2
How many children forgot their swimming kit? _____ (2)
- (d) Write down the ratio of children that chose swimming : running : rugby in Mr Richard's class. Remember to write the ratio in its simplest form.
_____ (1)
- (e) A new table tennis club is set up and 20% of the children join this club instead.
How many children is this? _____ (2)

- 2 Toby has eight cards showing different numbers, like the cards below.



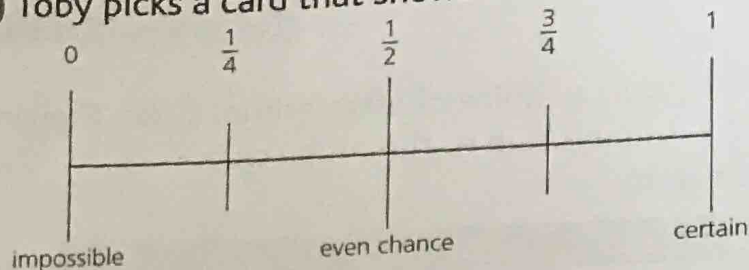
On the probability scales below, 0 means that an outcome is impossible and 1 means that it is certain. Mark the probability of each outcome on the diagram with an X.

- (a) Toby picks a card that shows a square number. (1)



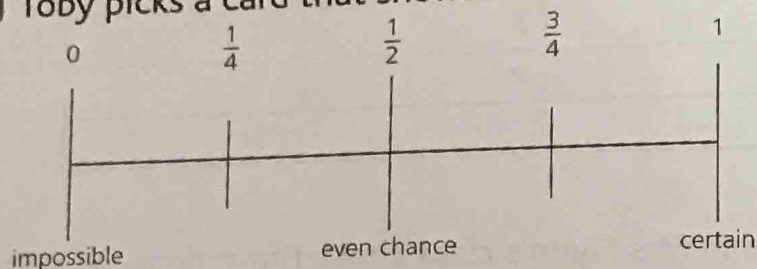
(b) Toby picks a card that shows an even number.

(1)



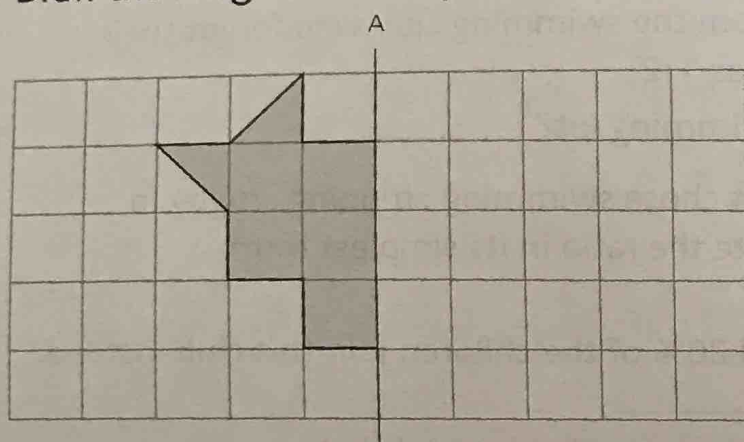
(c) Toby picks a card that shows a factor of 24

(1)



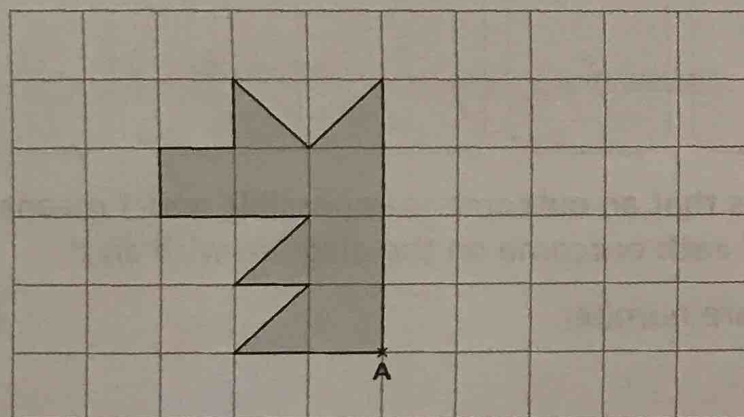
3 Draw the image of the shape when it is reflected in line A.

(1)



4 Draw the image of the shape when it is rotated 90° clockwise about point A.

(1)



5 Look at the information in the table below.

Name	Hair colour	Height (cm)	Shoe size	School sweater colour	Wear a tie
Anne	black	151	7	black	Yes
Joe	blonde	145	6	blue	No
Darren	brown	153	7	blue	Yes
Arjun	brown	150	8	red	No
Ben	ginger	141	7	black	Yes
Phoebe	blonde	143	5	green	No

(a) How many of the children have brown hair and wear a red sweater? _____

(1)

(b) How many of the children wear shoes smaller than size 7? _____

(1)

(c) How many children are taller than Joe? _____

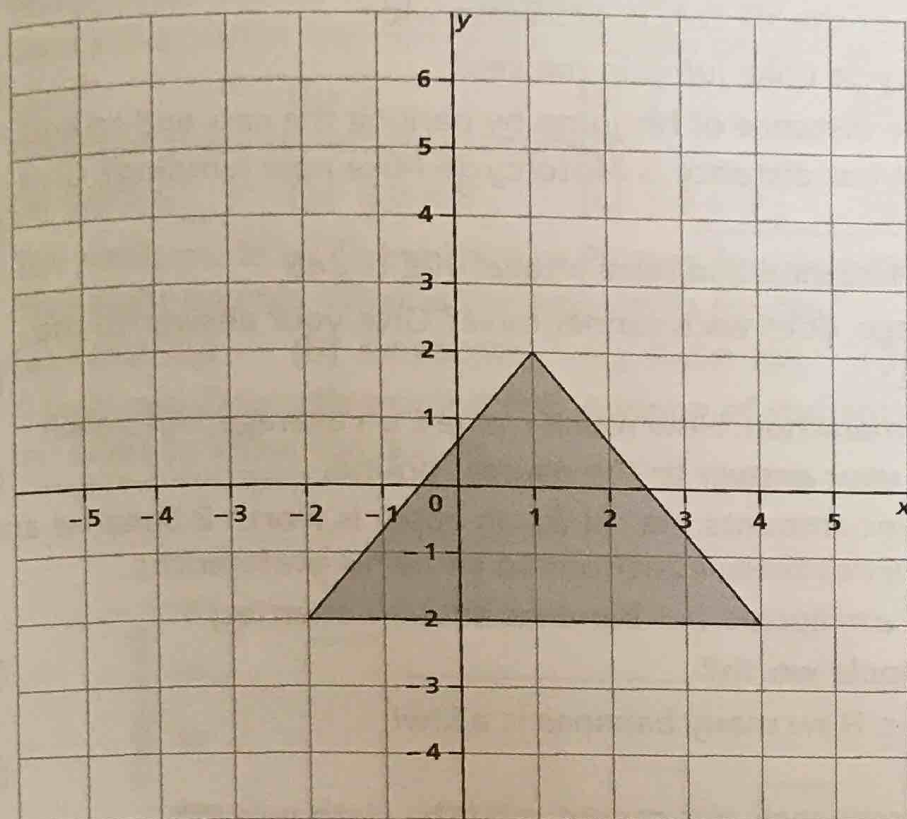
(1)

(d) How many children have a sweater the same colour as their hair? _____

(1)

6 The isosceles triangle on the grid is translated two squares to the left. What are the co-ordinates of the three vertices? _____

(3)



7 Alice went on holiday to *Unbelievableland* where the unit of currency is the Bling (B). The exchange rate at her bank was $\text{£}1 = 4$ Blings.

(a) Alice exchanged $\text{£}350$

How many Blings did she receive? _____

(1)

(b) Alice bought some suntan cream for 120 B, a hat for 85 B, a guide book for 100 B and a flag for 230 B. How much was the total in UK pounds? _____

(2)

(c) Alice uses up all of her Blings so she changes some more money at her hotel. She changes $\text{£}120$ at an exchange rate of $\text{£}1 = 3.5$ Blings. How many more Blings would she have received if she had exchanged the money at her bank before she went on holiday? _____

(3)

(d) At the end of her holiday, Alice still has 150 Blings. She changes these back into pounds at a rate of 3 Blings = $\text{£}1$


How many UK pounds does she receive? _____

(1)

(e) Alice sees the same suntan cream she bought in *Unbelievableland* being sold for $\text{£}28.50$

Using the exchange rate 1 UK pound = 4 Blings, in which country was the suntan cream cheaper and by how many Blings? _____

(2)

- 8 Beatrice has written the first 100 pages of her new book. On average, there are 350 words on each page.
- (a) How many words has she written so far? _____ (1)
- (b) Beatrice writes 5 more pages to finish her book. How many words are in the book now? _____ (2)
- (c) Beatrice wrote 3 pages of her book each day. How many days did it take her to write the book? _____ (2)
- 9 Motorcycle Mike jumps over parked cars as part of his stunt show. The cars are parked side by side with no gaps. Each of the six cars is 1750 mm wide.
- (a) What distance does Motorcycle Mike jump in metres? _____ (2)
- (b) Mike decides to increase the distance of his jump by parking the cars end to end. Each car is 4740 mm long. What distance is Motorcycle Mike now jumping? Give your answer in metres. _____ (2)
- 10 Eight runners run the London Marathon and raise a total of £17 248
- (a) How much money, on average, does each runner raise? Give your answer to the nearest £10 _____ (2)
- (b) There are 26 full miles in a marathon. How much money, on average, does each runner raise per mile? Give your answer to the nearest pound. _____ (2)
- 11 Alan likes all fruit, but in different amounts. He thinks an apple is worth 2 bananas and a banana is worth 4 cherries. He has these equations to show his preferences.
 $a = 2b$ and $b = 4c$ (where a = apples, b = bananas and c = cherries)
- (a) How many cherries is one apple worth? _____ (2)
- (b) A kiwi fruit is worth 3 apples. How many bananas is a kiwi worth? _____ (2)
- 12 Jo has written down a number sequence, but cannot read the sixth number.
- 1, 4, 13, 40, 121, 
- What should the sixth number be? _____ (2)

Record your results and move
on to the next paper

Score

/ 51

Time