

PiAcademy

11 + Mathematics SET Style - Pack 1 Test Paper - 1

Instructions:

1. The time allowed is 45 minutes for 50 questions.
2. This is a multiple-choice test and each question carries 1 Mark.
3. Answers should be clearly marked in pencil on the provided answer sheet.
4. Do not turn over the booklet until you are told to do so.
5. No Marks are lost for an incorrect answer.
6. If you have marked the wrong answer, erase it and mark the new one. Make sure that your final answer is clear.

Symbols used:



Go to the next page.

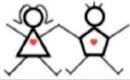


Do not turn the page until told to do so.



Stop working and await instructions.

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1 Which equation is correct?

(A) $3 \times 4 + 2 - 5 \div 6 = 4$

(B) $3 - 2 \times 5 \div 2 + 4 = 2$

(C) $6 \times 5 \div 3 + 2 \div 4 = 3$

(D) $5 \div 3 \times 6 + 1 - 3 = 4$

(E) $6 \div 3 \times 2 + 4 - 1 = 5$

2 Mark rides a horse with a speed of 10 km per hour. It took 4 hours for him to travel from his home to the race club and back again. What is the distance between his home and the race club?

(A) 40km

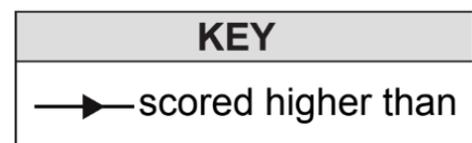
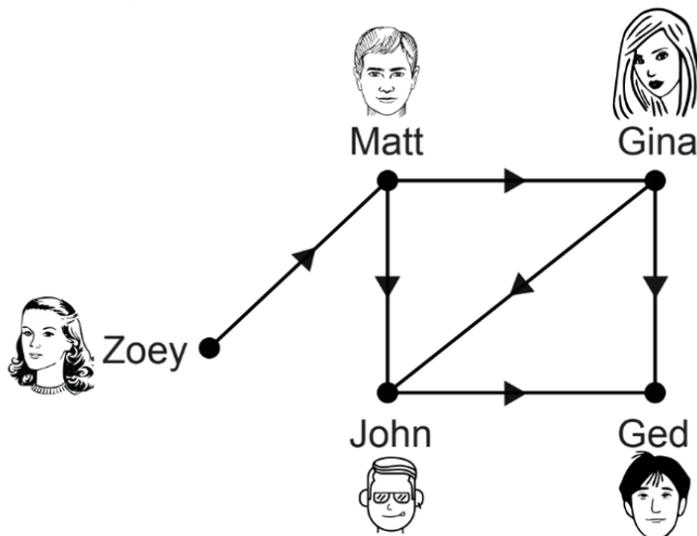
(B) 30km

(C) 20km

(D) 10km

(E) 15km

3 Five students were given their mark for their Mathematics exam. This diagram shows their results.



Which student got the lowest mark?

(A) Zoey

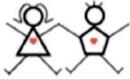
(B) Matt

(C) John

(D) Ged

(E) Gina

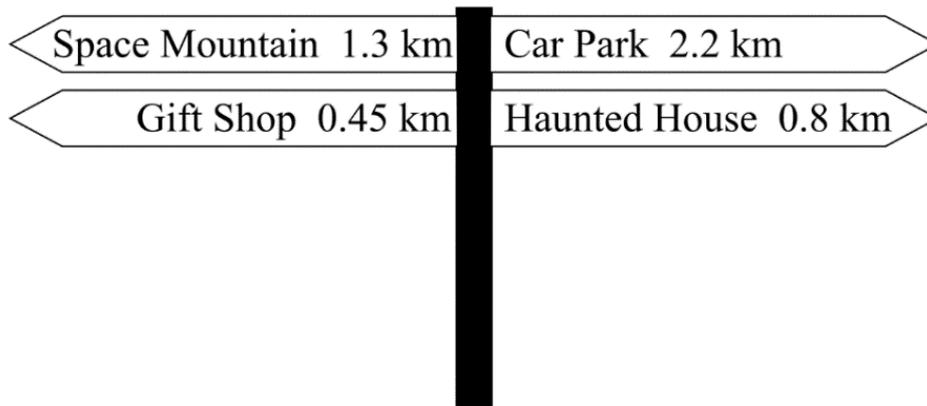




- 4 A cookie recipe contains a $\frac{1}{3}$ cup of sugar.
Which of the following represents the same amount of sugar?

(A) $\frac{2}{4}$ (B) $\frac{4}{12}$ (C) $\frac{6}{9}$ (D) $\frac{6}{15}$ (E) $\frac{9}{24}$

- 5 Mickey sees this signpost at Disneyland.



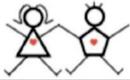
How many metres is it from the car park to the gift shop?

- (A) 2.65 km (B) 1.75 km (C) 1750 metres
(D) 2650 metres (E) 1750 km
- 6 Jess started gardening at 10:44 am and finished at 12:10 pm.
How long did Jess spend gardening?
- (A) 36 mins (B) 54 mins (C) 1 hour 06 mins
(D) 1 hour 26 mins (E) 2 hours 06 mins

- 7 A suit costs £84 in a '30% off' sale.
Find the original price of the suit.

(A) £200 (B) £100 (C) £120 (D) £130 (E) £96





- 8 Look at the shape names:
Prism, Cylinder, Cube, Pyramid, Cuboid
Two of these shapes always have 6 faces.
Write the names of the two shapes.

- (A) Pyramid, Cube (B) Prism, Pyramid (C) Cuboid, Prism
(D) Cube, Cuboid (E) Cylinder, Prism

- 9 Here are three supermarket bills.

4.68	4.68	4.68
5.48	5.48	5.48
0.48	0.48	0.48
0.22	0.22	0.22
1.25	1.25	1.25
3.48	3.48	3.48
2.67	2.67	2.67
4.94	4.94	4.94
3.67	3.67	3.67
2.55	2.55	2.55
1.59	1.59	1.59
2.78	2.78	2.78
3.45	3.45	3.45
Total	Total	Total
£74.68	£65.90	£59.05

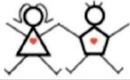
Tom rounds each bill to the nearest £10 and adds them up. What is the total amount that Tom gets?

- (A) £190 (B) £200 (C) £180 (D) £210 (E) £170

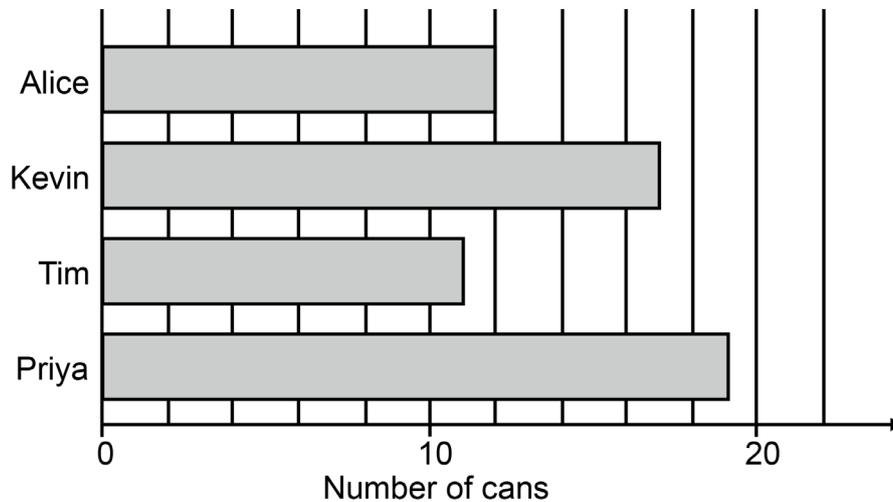
- 10 Andre prepares the ingredients for a pizza.
He uses cheese, tomatoes and dough in the ratio 3:2:5.
Andre uses 80 grams of dough.
Work out the number of grams of tomatoes that Andre uses.

- (A) 32g (B) 20g (C) 15g (D) 16g (E) 24g





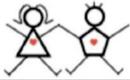
- 11** Some children collect cans for recycling.
Here is a chart of how many cans they collect in the first week.



Alice's target is to collect 30 cans. How many more cans does Alice need to reach her target?

- (A) 16 (B) 20 (C) 30 (D) 26 (E) 18
- 12** What number must you multiply 0.07 by to get 2100?
- (A) 300 (B) 30000 (C) 3000 (D) 30 (E) 300000
- 13** Burgers are sold in packs of 6
Buns are sold in packs of 10
Liam wants to buy the same number of burgers and buns.
Work out the smallest number of packs of each item he could buy.
- (A) 3 packs of burgers and 5 packs of buns
(B) 4 packs of burgers and 6 packs of buns
(C) 10 packs of burgers and 6 packs of buns
(D) 5 packs of burgers and 3 packs of buns
(E) 6 packs of burgers and 4 packs of buns





- 14 There are 2 red counters, 9 blue counters and 3 green counters in a bag.
Nisha then puts some more green counters in the bag.

The probability of picking a red counter is now $\frac{1}{9}$.

Work out the number of green counters that are now in the bag.

(A) 7 (B) 4 (C) 11 (D) 18 (E) 3

- 15 Which of these numbers has a 3 in the thousandths place?

(A) 0.3244 (B) 2.8309 (C) 7.8231 (D) 23082 (E) 35379

- 16 Greg plays golf.

During one round, he found 11 golf balls and lost 4.

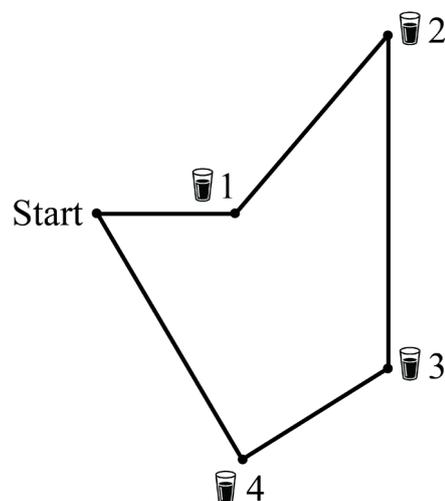
At the end of the round, Greg had a total of 16 golf balls.

How many golf balls did Greg start with?

(A) 1 (B) 9 (C) 7 (D) 23 (E) 20

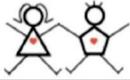
- 17 An orientation course is set up with 4 drinking stations. Runners start and then progress through the course in the order of the drinking stations labelled 1-4 in the diagram.

At which drinks station do the runners make the greatest change of direction?



(A) Station 3 (B) Station 4 (C) Station 2 (D) Start (E) Station 1

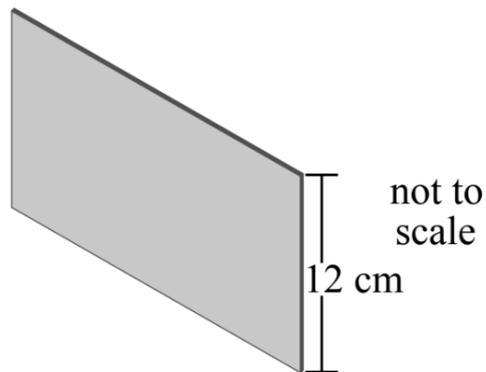




- 18 On Monday, Jeremy went to the doctor and was given 80 tablets. Jeremy had to take 5 tablets each day starting from Monday. On which day did Jeremy take the last tablet?

(A) Monday (B) Wednesday (C) Saturday (D) Sunday (E) Tuesday

- 19 Adam is laying tiles that are shaped like a parallelogram. The longer sides are 2.5 times the length of the shorter sides. What is the perimeter of one of the tiles?



(A) 42cm (B) 84cm (C) 96cm (D) 360cm (E) 120cm

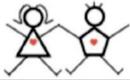
- 20 Which two cards have the same value?



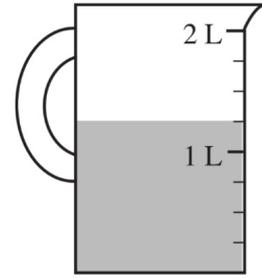
Which two cards have the same value?

- (A) 3^4 and 4^3 (B) 9^2 and 4^3
(C) 3^4 and 6^2 (D) 9^2 and 3^4
(E) None of the above





- 21 A container has some water in it as shown in the figure.
An extra 300 mL of water is added to the container.
How many millilitres (mL) of water will then be in the jug?



- (A) 1400 ml (B) 1600 ml (C) 1550 ml (D) 1450 ml (E) 1800 ml

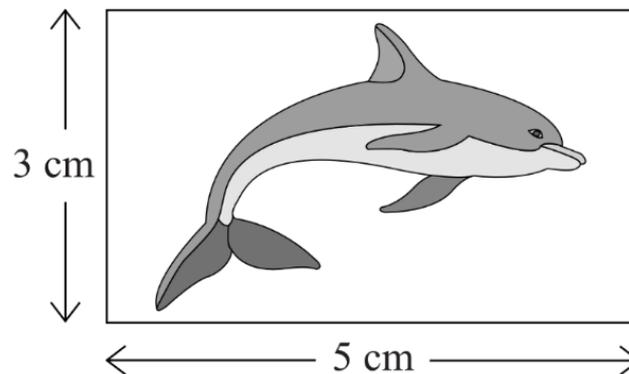
- 22 The first three days of the Brisbane cricket test had the following attendances:

Crowd Size	
Day 1	20 156
Day 2	18 397
Day 3	29 981

What was the total crowd over the first 3 days, to the nearest 1000?

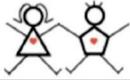
- (A) 68000 (B) 69000 (C) 70000 (D) 71000 (E) 72000

- 23 Poppy uses a photocopier to enlarge this picture.
The enlarged picture is 3 times as high and 3 times as wide as the original.
The area of the enlarged picture is

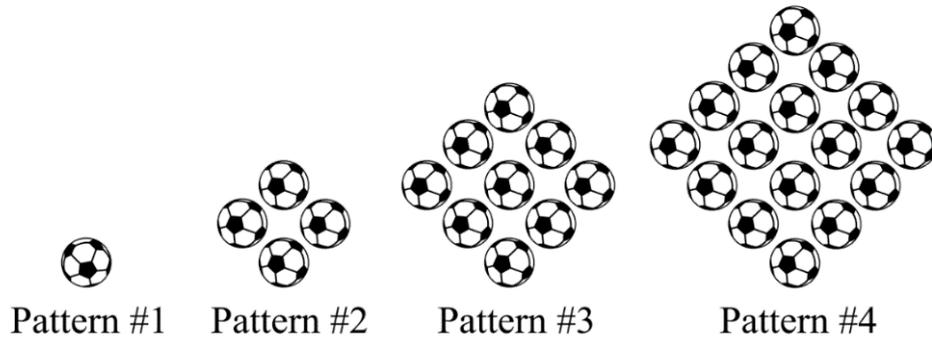


- (A) 3 times the area of the original. (B) 6 times the area of the original.
(C) 9 times the area of the original. (D) 24 times the area of the original.
(E) 15 times the area of the original.





- 24 Flynn is making a pattern with soccer balls.

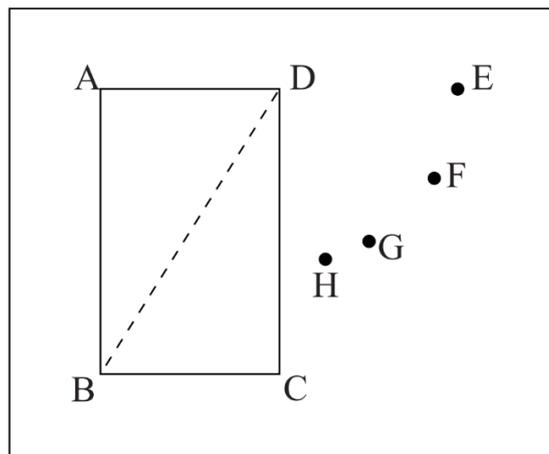


How many balls will Flynn need for Pattern #5 ?

- 25 John attended a Maths debate competition along with his team. There are 5 chairs to sit and 5 people on John's team. How many different seating arrangements are possible?

(A) 120 (B) 100 (C) 25 (D) 55 (E) 50

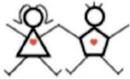
- 26 The rectangle below will be folded along the dashed line,



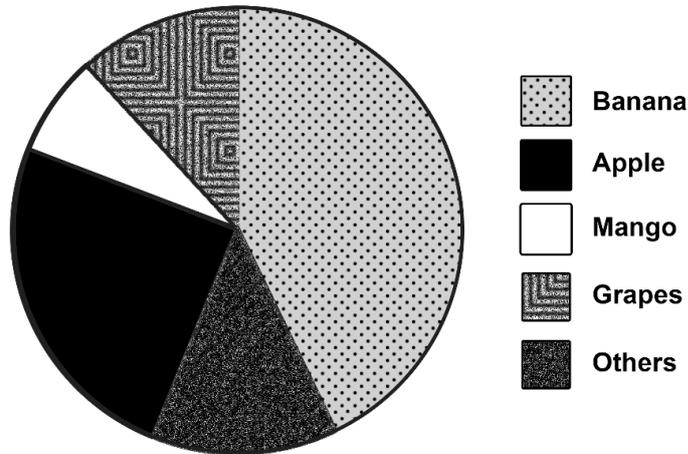
Where will point A move to?

(A) C (B) E (C) F (D) G (E) H





- 27 Anne taught a kindergarten class and asked her students what their favourite fruit is. Their answers were used to draw the pie chart below.



Around a quarter of her students preferred which fruit?

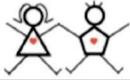
- (A) Mango (B) Grapes (C) Banana (D) Apple (E) Others
- 28 Two numbers are in the ratio 3:2. One of the numbers is 0.6. There are two possible answers for the other number. What are the two possible numbers?
- (A) 0.3 and 0.4 (B) 0.9 and 0.4 (C) 0.3 and 0.6
(D) 0.9 and 0.3 (E) 0.6 and 0.4
- 29 The goals scored by 4 players in a season of water polo were recorded in the pictogram below.

Ginili	
Bilbo	
Sam	
Will	

Will scored 8 goals in the season. Sam scored 5 goals. How many more goals did Bilbo score than Ginili ?

- (A) 3 (B) 5 (C) 7 (D) 4 (E) 6





- 30** Milly opens a hat store.
Each week she sells twice as many hats as the week before.

Week	Hats sold
Week 1	10
Week 2	20
Week 3	40
Week 4	80

How many hats will Milly sell in week 7 if this pattern continues?

- 31** Percy buys a cricket ball and a set of stumps. The total cost is £ 57.
The stumps cost £ 15 more than the ball. What is the cost of the stumps?

(A) £36 (B) £21 (C) £26 (D) £11 (E) £30

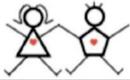
- 32** Peter moves the marker 3 squares left, then 2 squares up, then 4 squares right and then 3 squares down.

What cell does Peter move the marker to?

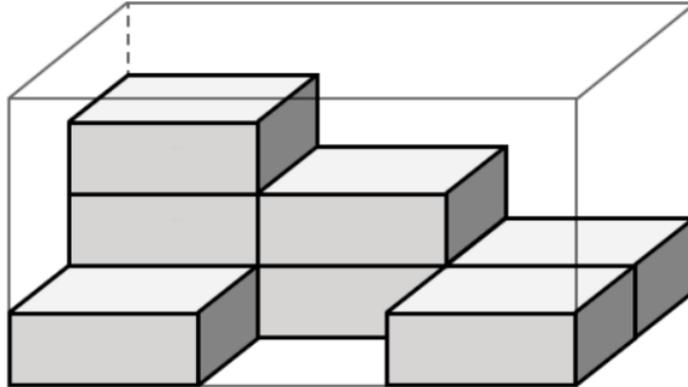
6								
5								
4								
3				●				
2								
1								
	A	B	C	D	E	F	G	H

(A) B5 (B) G3 (C) H5 (D) B3 (E) F2





- 33 There are 8 small boxes packed into the carton below like shown.



How many more small boxes can fit inside the carton?

- (A) 18 (B) 12 (C) 24 (D) 20 (E) 16

- 34 Kim is packing 79 plums into boxes to take to the market. Each box can hold 15 plums. What is the smallest number of boxes Kim needs to make sure all the plums are packed?

- (A) 5 (B) 4 (C) 6 (D) 7 (E) 8

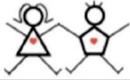
- 35 These are the marks from a spelling test.

13, 15, 20, 19, 15, 14, 13, 10, 13

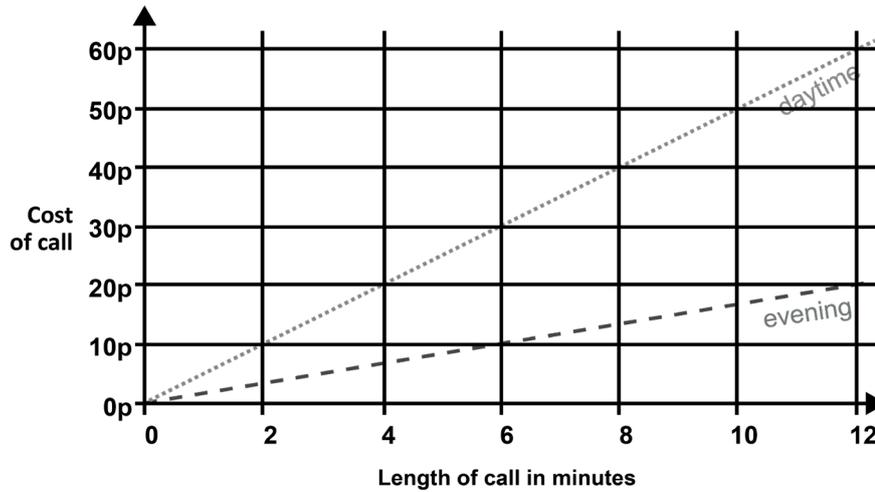
What is the mode and median number of the marks?

- (A) Mode = 15, Median = 13 (B) Median = 15, Mode = 13
(C) Median = 10, Mode = 15 (D) Mode = 13, Median = 13
(E) Mode = 13, Median = 14





- 36 This graph shows the cost of phone calls in the daytime and in the evening.



How much more does it cost to make a 6 minute call in the daytime than in the evening?

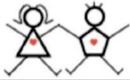
- (A) 30p (B) 15p (C) 40p (D) 10p (E) 20p
- 37 Saima recorded the minimum and maximum temperature on each of six days in February. The minimum temperature on Monday was 2°C higher than the minimum temperature on Tuesday. What is the minimum temperature on Monday?

	Tue	Wed	Thurs	Fri	Sat	Sun
Maximum temperature	2°C	3°C	1°C	0°C	2°C	3°C
Minimum temperature	-4°C	-1°C	-3°C	-6°C	-2°C	-5°C

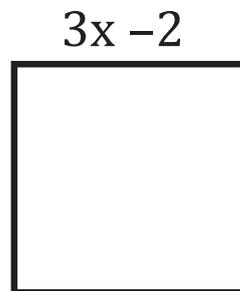
- (A) 2°C (B) -6°C (C) 4°C (D) 0°C (E) -2°C
- 38 I am 32 years old. I am four times as old as my son. What is the difference between our ages after 13 years?

- (A) 19 (B) 24 (C) 17 (D) 29 (E) 22

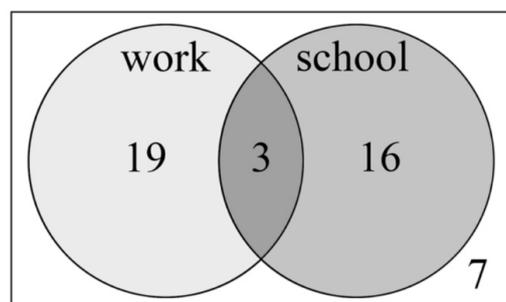




- 39 Look at the square below:
What is the value of x if the perimeter is 52cm?

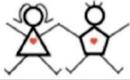


- (A) 5 (B) 6 (C) 4 (D) 2 (E) 3
- 40 Which of these codes look the same when rotated 180° ?
- (A) P86 (B) p0d (C) m69 (D) 6N9 (E) 80b
- 41 40 cartons of Milk exactly fit into a container. Each carton has 148 ml of Milk in it.
What is the total capacity of the container to the nearest litre?
- (A) 5 L (B) 7 L (C) 6 L (D) 8 L (E) 10 L
- 42 Zelda asked few eighteen-year-olds whether they work, go to school, do both or do neither.
The Venn diagram shows the results.
How many people did Zelda ask in total?

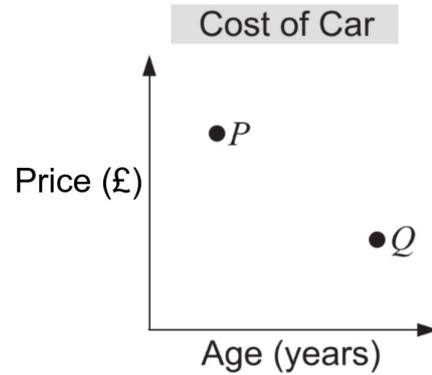


- (A) 35 (B) 39 (C) 45 (D) 30 (E) 38





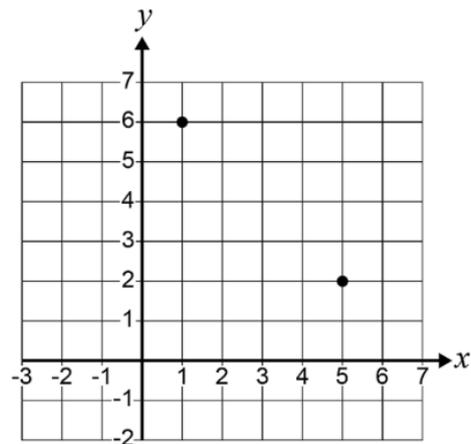
- 43 A dealership sells new and used cars. The graph shows the price of 2 similar cars and their age in years



Which one of these statements is true?

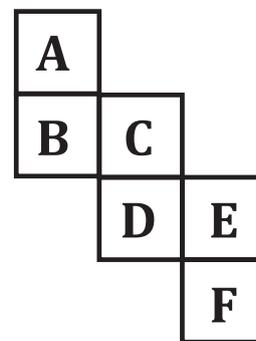
- (A) Car P is older and more expensive than Car Q.
(B) Car P is newer and less expensive than Car Q.
(C) Car Q is older and less expensive than Car P.
(D) Car Q is newer and more expensive than Car P.
(E) Car P and Car Q have the same price.

- 44 Jamie is drawing a square on this grid.
He has drawn two corner points as shown.
Jamie draws the third corner at (5, 6).
Where will the other corner of the square be?



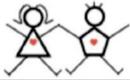
- (A) (1, 2) (B) (2, 1) (C) (1, 6) (D) (2, 2) (E) (1, 1)

- 45 Ajay folds this net into a cube.
He places the cube on the table so that the top face is the **letter A**.
Which face is touching the table?



- (A) B (B) C (C) D (D) E (E) F

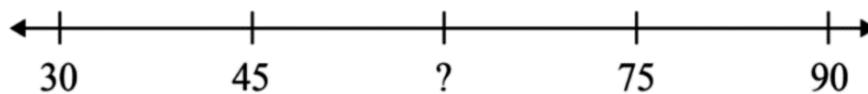




- 46 A shop sells eggs in small and large cartons.
A small carton holds 6 eggs.
A large carton holds 12 eggs.
Alice buys a total of 60 eggs. She buys 3 large cartons and some small cartons.
How many small cartons does she buy?

(A) 6 (B) 8 (C) 4 (D) 5 (E) 7

- 47 What is the missing number on this number line?



(A) 55 (B) 50 (C) 60 (D) 65 (E) 58

- 48 Sam calculated the area of his room. Which of these might be an approximate estimation of the area that sam calculated?

(A) 0.25 km^2 (B) 1.5 m^2 (C) 900 cm^2 (D) 10000 mm^2 (E) 98 ft^2

- 49 Alex had 3 toys with him. One is a Spiderman toy, the second is an Ironman toy and the third is a Superman toy. Ironman and Spiderman together cost £ 2.50. Spiderman and Superman together cost £ 3.50. Superman and Ironman together cost £ 4.00. What is the cost of all the three toys together?

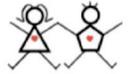
(A) £ 7.50 (B) £ 8.00 (C) £10.00 (D) £ 5.00 (E) £ 4.50

- 50 Kaley has six 20p coins, four 3p coins and twelve 2p coins in her purse. She needs to pay a bill of £1.45 at a cafe. What is the least number of coins she can use to pay her bill exactly (without any extra or less amount)?

(A) 20 (B) 16 (C) 18 (D) 19 (E) 17



11+ Maths SET Style (Pack 1) - Test Paper 1
ANSWER MARKING SHEET



Name: _____

Date: _____

School Name: _____

Please mark boxes with a thin horizontal line like this - .

1	2	3	4	5	6	7	8	9	10
A <input type="checkbox"/>									
B <input type="checkbox"/>									
C <input type="checkbox"/>									
D <input type="checkbox"/>									
E <input type="checkbox"/>									
11	12	13	14	15	16	17	18	19	20
A <input type="checkbox"/>									
B <input type="checkbox"/>									
C <input type="checkbox"/>									
D <input type="checkbox"/>									
E <input type="checkbox"/>									
21	22	23	24	25	26	27	28	29	30
A <input type="checkbox"/>									
B <input type="checkbox"/>									
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D <input type="checkbox"/>									
E <input type="checkbox"/>									
31	32	33	34	35	36	37	38	39	40
A <input type="checkbox"/>									
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D <input type="checkbox"/>									
E <input type="checkbox"/>									
41	42	43	44	45	46	47	48	49	50
A <input type="checkbox"/>									
B <input type="checkbox"/>									
C <input type="checkbox"/>									
D <input type="checkbox"/>									
E <input type="checkbox"/>									

For Parents use only

Marks Scored: Time taken:

Comments:

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