Test 7

You have 50 minutes to complete this test.
You have 50 questions to complete within the given time.

50

Circle the letter above or alongside the correct answer.
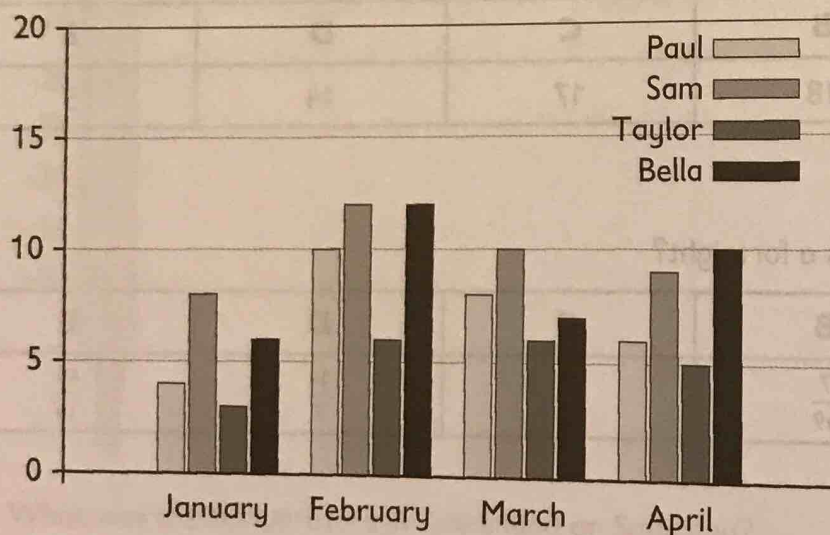
1) How many eighths are there in 12?

A	B	C	D	E
12	8	18	96	108

2) Which of the following equals 2450?

A	2450 rounded to the nearest 100
B	2366 rounded to the nearest 50
C	2458 rounded to the nearest 10
D	2445 rounded to the nearest 10
E	2480 rounded to the nearest 10

3) This bar chart shows the number of apples eaten by four people over four months.


Who ate the most apples in March?

A	B	C	D	E
Paul	Sam	Taylor	Bella	Simon

(4) Change the order of the figures 37 281 to make the largest number possible.

A	B	C	D	E
37 281	87 321	87 231	28 123	87 331

(5) The time in Mumbai is $5\frac{1}{2}$ hours ahead of the time in London.
If it is 02:45 in Mumbai, what is the time in London?

A	B	C	D	E
07:45	08:15	09:15	21:15	21:45

(6) Which of the following is the best estimate of the size of Angle A?
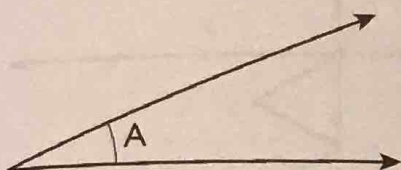
A	B	C	D	E
20°	90°	75°	130°	225°

(7) $49 + (18 \div 6) = \boxed{}$

A	B	C	D	E
$11\frac{4}{25}$	54	46	17	52

(8) How many empty bottles with a capacity of 300 ml can be filled from a jug that contains 4·8 litres of water?
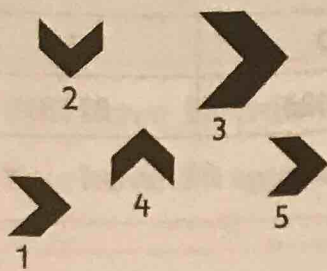
A	B	C	D	E
15 bottles	3 bottles	18 bottles	16 bottles	5 bottles

(9) What is 37·5% of 80?

A	B	C	D	E
40	37·5	24	32	30

(10) Which of the moves described in the table below is a translation?

A	B	C	D	E
2 → 3	4 → 5	4 → 3	1 → 3	5 → 1

(11) This diagram shows the distance in metres between shops in a city.
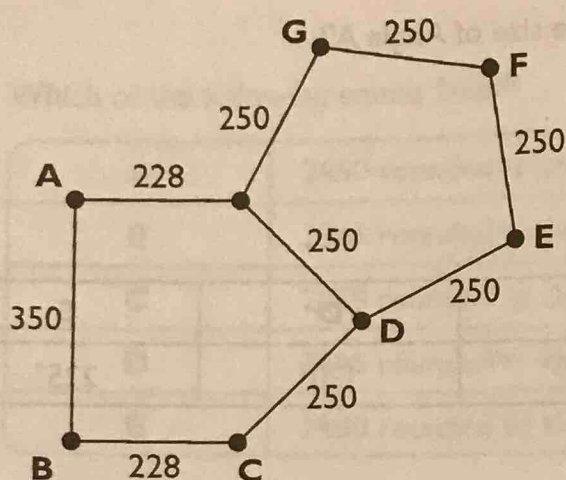
Vijay walks from Shop G to Shop C using the shortest route possible.

How far did Vijay walk?

A	B	C	D	E
0·7 km	1·056 km	0·25 km	1 km	0·75 km

(12) I think of a number, subtract it from 75 and then double the result.
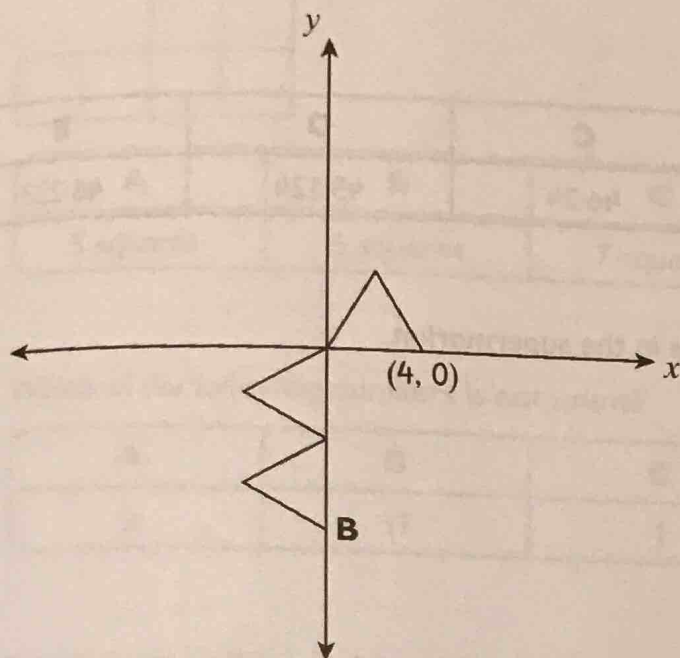My answer is 120

What number did I think of?

A	B	C	D	E
15	135	45	60	30

13 The mean weight of 3 boxes is 3·45 kg.

If 2 of the boxes each weigh 3·5 kg, what is the weight of the third box?

A	B	C	D	E
3·45 kg	3·5 kg	3·35 kg	3·2 kg	3·55 kg

14 Three identical equilateral triangles are drawn.

(4, 0)

B

What is the x-coordinate of Point B?

A	B	C	D	E
0	4	8	12	5

15 Tanish faces south-west.

He turns 45° in a clockwise direction.

In which direction is Tanish now facing?

A	B	C	D	E
west	north	south	east	south-east

16 4 tigers take 7 hours to eat 40 kilograms of meat.

How long would it take 8 tigers to eat 80 kilograms of meat?

A	B	C	D	E
6 hours	3·5 hours	14 hours	7 hours	21 hours

(17) The area of a rectangle is 128 cm².
The length of the rectangle is twice its width.

What is the width of the rectangle?

A	B	C	D	E
16 cm	4 cm	8 cm	22 cm	28 cm

(18) $0.034 + 45.9 =$ ☐

A	B	C	D	E
49.3	45.934	46.24	45.124	46.233

(19) Jake sees the following offer for oranges in the supermarket.

> Buy 3 and get the 4th half price!

An orange costs 44 pence.
Jake buys 15 oranges.

How much does he pay in total?

A	B	C	D	E
£6.60	£6.30	£6.16	£5.94	£5.84

(20) What is the sum of the three largest 2-digit whole numbers?

A	B	C	D	E
300	297	294	295	291

(21) Garv spent £37.50 buying bags of potatoes.
Each bag cost £2.50 and weighed 750 g.

What was the total weight of the bags of potatoes that Garv bought?

A	B	C	D	E
15 kg	11.25 kg	37.5 kg	2.5 kg	18.75 kg

(22) What is 2·3 expressed as an improper fraction?

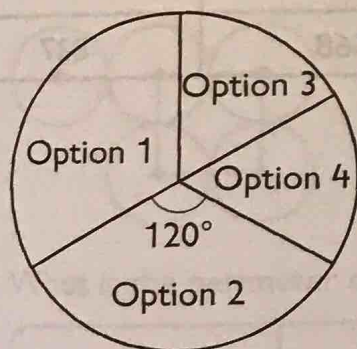| A	B	C	D	E
$\dfrac{2}{3}$	$\dfrac{23}{3}$	$\dfrac{46}{20}$	$\dfrac{45}{2}$	$\dfrac{5}{3}$

(23) How many squares are there in the diagram below?
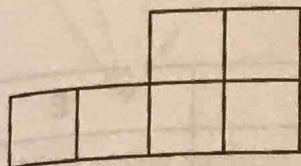
A	B	C	D	E
5 squares	6 squares	7 squares	8 squares	9 squares

(24) Which of the following numbers is not prime?

A	B	C	D	E
2	17	1	47	59

(25) The students at Braston School were asked to choose their favourite logo design from four options.

Their choices are shown in the pie chart below.
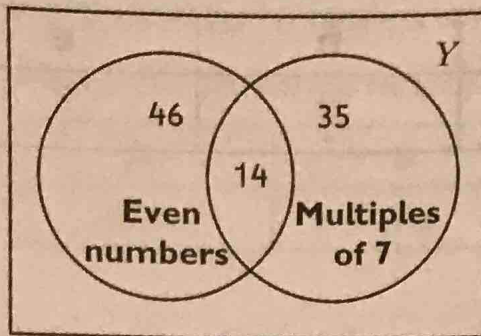
Options 3 and 4 were equally popular.

Options 1 and 2 were equally popular.

If 80 students chose Option 1, how many students were asked in total?

A	B	C	D	E
240	80	160	40	320

26 Which number could be the value of Y in this Venn diagram?

A	B	C	D	E
44	59	63	56	7

27 How many months in a year have more than 30 days?
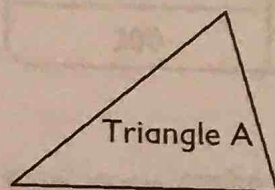
A	B	C	D	E
5	6	7	8	9

28 $7X + 2Y - 12$

$3X + 8Y + 32$

If $X = 7$ and Y equals the largest 2-digit even number, what is the difference in value between these two expressions?

A	B	C	D	E
233	135	604	568	837

29 The sum of the angles in Triangle A is 180°.

Triangle A

Triangle B is formed by doubling all the sides of Triangle A.

What is the sum of the angles in Triangle B?

A	B	C	D	E
90°	135°	180°	360°	540°

(30) The shape below is formed from identical isosceles triangles.
Each triangle has a base of 7 cm and a height of 10 cm.
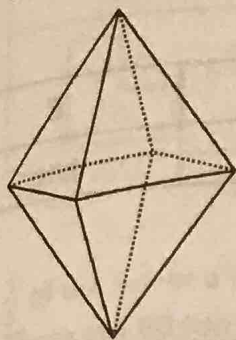
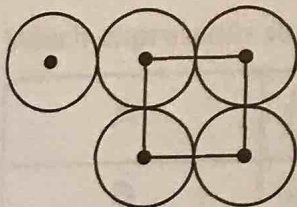What is the surface area of the shape?

A	B	C	D	E
35 cm²	280 cm²	560 cm²	140 cm²	70 cm²

(31) Greg drove 65 kilometres in 75 minutes.
What is Greg's speed in kilometres per hour?

A	B	C	D	E
65 kph	52 kph	45 kph	30 kph	55 kph

(32) Each circle below has a diameter of 39 cm.
The centre of each circle is marked by a black dot.

What is the perimeter of the square?

A	B	C	D	E
3·12 m	0·78 m	0·39 m	1·56 m	4·5 m

(33) What percentage of £30 is 30 pence?

A	B	C	D	E
30%	3%	10%	300%	1%

(34) Reena draws a shape with exactly 1 pair of parallel lines.

The sum of the angles in Reena's shape is 360°.

What shape did Reena draw?

A	B	C	D	E
square	parallelogram	trapezium	rectangle	kite

(35) Which of these is the smallest?

A	B	C	D	E
$\frac{2}{5}$ of 75	half of 62	$\frac{1}{8}$ of 248	30% of 90	9 × 4

(36) Which number should go in the box?

$67 \cdot 5 \div \boxed{} = 675$

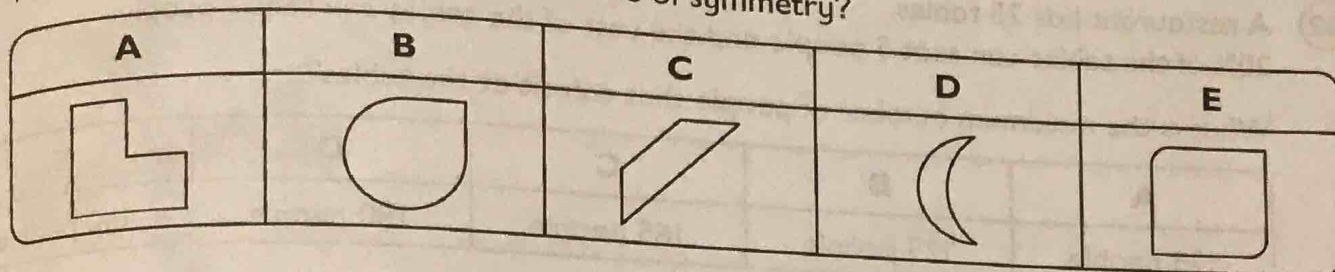| A	B	C	D	E
100	10	1	0·1	0·01

(37) This chart shows the rainfall in millimetres in a town during different months in a year.
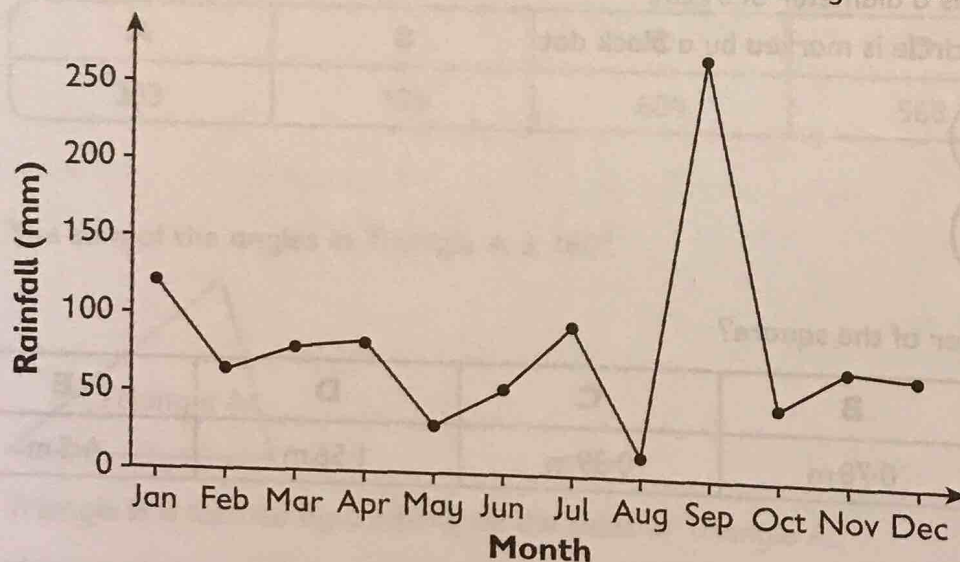
In which month was there the second lowest amount of rainfall?

A	B	C	D	E
August	May	September	January	April

38 Which of these shapes has more than 1 line of symmetry?

A	B	C	D	E

39 $\frac{1}{5}$ of the fish in a pond have blue scales.

There are 80 fish in the pond that do not have blue scales.

What is the difference between the number of fish that have blue scales and the number of fish that do not have blue scales?

A	B	C	D	E
20	64	40	16	60

40 The height of this triangle is three times greater than its base.

X cm

Which expression shows the area of the triangle?

A	$\left(\frac{X}{2} \times 3X\right)$ cm²
B	$(X \times 3X)$ cm²
C	$\left(\frac{X}{2} \times X\right)$ cm²
D	$\left(\frac{1}{2} \times \frac{X}{2} \times 3X\right)$ cm²
E	$\left(2X \times 3X \times \frac{1}{2}\right)$ cm²

41 What is 4590 shared in 5 equal parts?

A	B	C	D	E
900	915	918	500	480

42 A restaurant has 25 tables.
20% of the tables can seat 5 people and the rest of the tables can seat 7 people.

What is the maximum number of people that can sit at the tables?

A	B	C	D	E
125 people	175 people	165 people	180 people	140 people

43 A lorry containing 9 boxes of cargo weighs 4582 kg.
Each box of cargo weighs $\frac{1}{5}$ of a tonne.

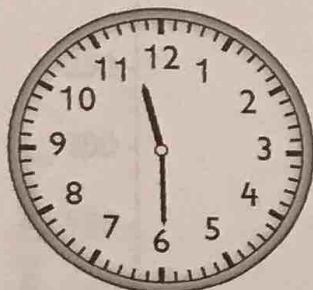What is the weight of the lorry and remaining boxes when 7 of the boxes of cargo are removed?

A	B	C	D	E
2782 kg	4582 kg	4382 kg	3549 kg	3182 kg

44 Y is an even number.

Which of the following expressions must be an odd number?

A	B	C	D	E
$Y \div 2$	$8Y + 2$	$3Y - 4$	$Y - 10$	$2Y - 5$

45 Work out the size of the obtuse angle between the hour and minute hands on this clock.

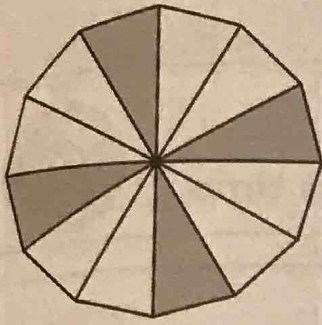| A	B	C	D	E
150°	175°	180°	225°	165°

46 There are three expressions shown below. x is a positive whole number.

What is the difference between the expression with the largest value and the expression with the smallest value?
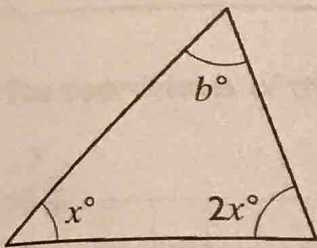
$x + 7 \qquad 2x + 9 \qquad x$

A	B	C	D	E
7	$2x + 7$	$4X + 16$	$3x + 12$	$x + 9$

47 What fraction of this shape is **not** shaded?

A	B	C	D	E
$\frac{1}{4}$	$\frac{1}{3}$	$\frac{3}{4}$	$\frac{2}{3}$	$\frac{5}{12}$

48 If $x° = 31°$, what is the value of $b°$?

A	B	C	D	E
87°	62°	89°	273°	93°

49 Mia's mean score in her first 4 tests was 79

Mia's score in her 5th test was 84

What was Mia's mean score in all 5 tests?

A	B	C	D	E
79	82·5	81	80	83

50 What is the sum of the 3 largest 2-digit prime numbers?

A	B	C	D	E
281	300	269	273	294