



Answer Sheet

Paper Name: Maths-Mixed Set-1

Paper ID: CUSTOM-MA-A276114719

Full Name:



**YOU MUST ANSWER ON THIS SHEET. TAKE A PICTURE USING THE EXAM HAPPY APP
AFTERWARDS TO MARK YOUR WORK.**

How to answer:



A



B



C



D



E

How not to answer:



A



B



C



D



E

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01	A	B	C	D	E
02	A	B	C	D	E
03	A	B	C	D	E
04	A	B	C	D	E
05	A	B	C	D	E
06	A	B	C	D	E
07	A	B	C	D	E
08	A	B	C	D	E
09	A	B	C	D	E
10	A	B	C	D	E
11	A	B	C	D	E
12	A	B	C	D	E
13	A	B	C	D	E
14	A	B	C	D	E
15	A	B	C	D	E
16	A	B	C	D	E
17	A	B	C	D	E
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23	A	B	C	D	E
24	A	B	C	D	E
25	A	B	C	D	E

26	A	B	C	D	E
27	A	B	C	D	E
28	A	B	C	D	E
29	A	B	C	D	E
30	A	B	C	D	E
31	A	B	C	D	E
32	A	B	C	D	E
33	A	B	C	D	E
34	A	B	C	D	E
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36	A	B	C	D	E
37	A	B	C	D	E
38	A	B	C	D	E
39	A	B	C	D	E
40	A	B	C	D	E
41	A	B	C	D	E
42	A	B	C	D	E
43	A	B	C	D	E
44	A	B	C	D	E
45	A	B	C	D	E
46	A	B	C	D	E
47	A	B	C	D	E
48	A	B	C	D	E
49	A	B	C	D	E
50	A	B	C	D	E

- 1.** Harpreet thinks of a two-digit number, squares it and then adds on original two-digit number. His final answer was 156.

Clue 1: Harpreet's number is a multiple of 3

Clue 2: Harpreet's number is an even number

What was Harpreet's original number?

A 24 **B** 36 **C** 15 **D** 12 **E** 33

- 2.** Ellie is now half her mum's age. Twelve years ago, her mum was three times as old as Ellie was.

How old is Ellie now?

A 24 **B** 10 **C** 5 **D** 12 **E** 20

- 3.** Polly weighs 8 kg.
Teddy weighs x kg more than Polly.
Their mean weight is 14kg

What is the value of x ?

A 10 kg **B** 12 kg **C** 8 kg **D** 14 kg **E** 6 kg

- 4.** The cost of 2 pens and 5 pencils is 18p.
The cost of 2 pens and 2 pencils is 12p.

What is the cost of one pen and one pencil?

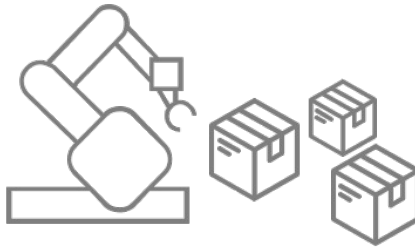
A 2p **B** 4p **C** 6p **D** 3p **E** 5p

5. Four consecutive numbers add up to 410.

What is the largest of the four numbers?

A 101 B 104 C 103 D 108 E 109

6. 5 people can pack 35 boxes per hour at a warehouse.
A robot can pack 40 boxes per hour at the same warehouse.



How many more boxes do 20 robots pack than 100 people in 2 hours?

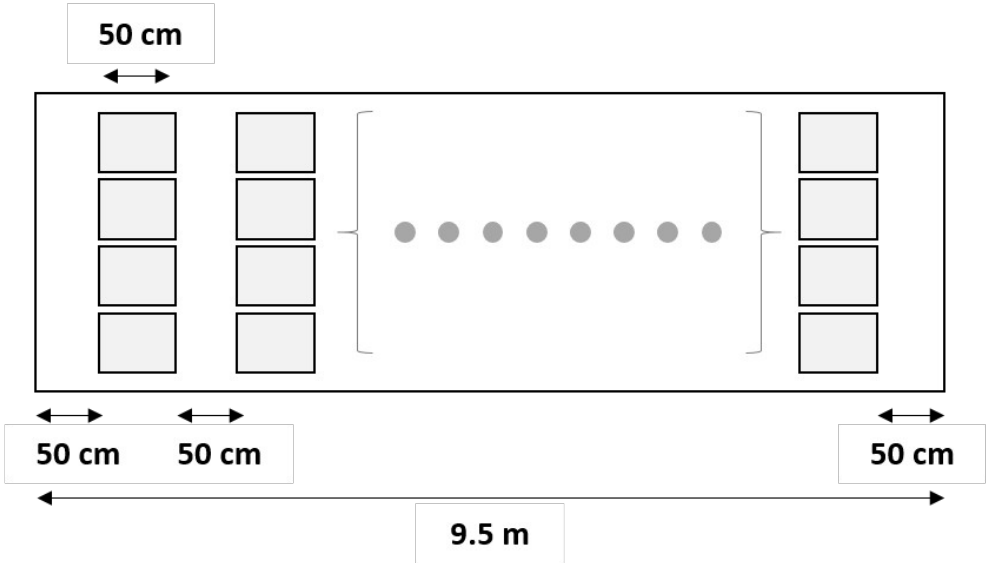
A 600 B 400 C 100 D 150 E 200

7. A rectangle has length of $(3x + 1)$ cm and width of $(x - 4)$ cm.
The perimeter of the rectangle is 50 cm.

What is the value of x ?

A 14 cm B 10 cm C 7 cm D 12 cm E 8 cm

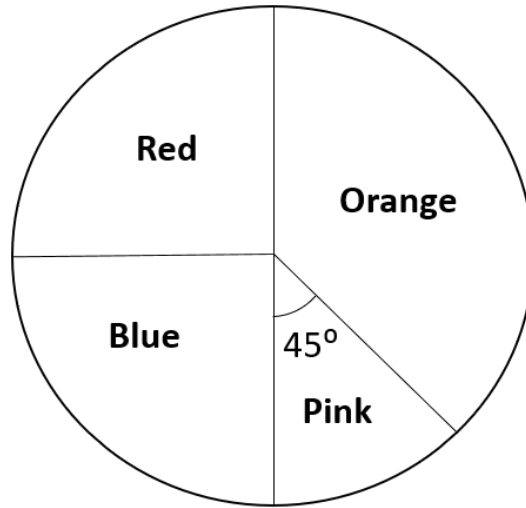
8. The diagram below represents a 9.5 m long train carriage. There are rows of 4 seats along the length of the train carriage which are 50 cm wide, and there is a 50 cm gap between each row. There is also a 50 cm space at the front and back of the carriage.



How many seats are on the train carriage?

- A 12 B 9 C 32 D 36 E 40

- 9.** The pie chart below shows the number of girls who like a particular colour of T-shirt.



The number of girls who like red T-shirts is 30.

How many more girls like orange T-shirts than pink t-shirts?

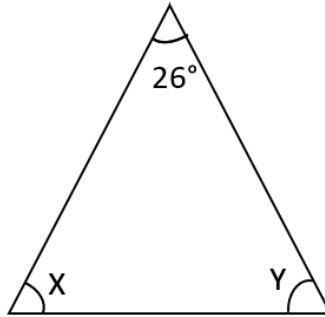
- A** 15 **B** 60 **C** 90 **D** 30 **E** 120

- 10.** The volumes of a cuboid and a cube are equal.
The side of the cube is 12 cm.
The length and the width of the cuboid are 16 cm and 9 cm.

What is the height of the cuboid?

- A** 12 cm **B** 8 cm **C** 10 cm **D** 11 cm **E** 9 cm

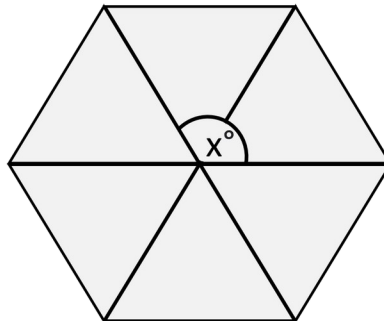
- 11.** A triangle with one angle of 26° is shown in the figure below.



What is the sum of angles X and Y?

- A** 154° **B** 156° **C** 164° **D** 152° **E** 162°

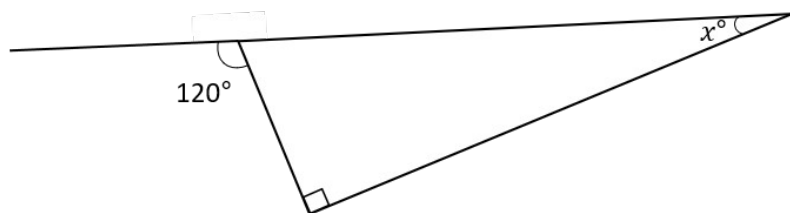
- 12.** The regular hexagon below is made up of six equilateral triangles.



What is the size of the angle marked x° ?

- A** 108° **B** 60° **C** 120° **D** 124° **E** 110°

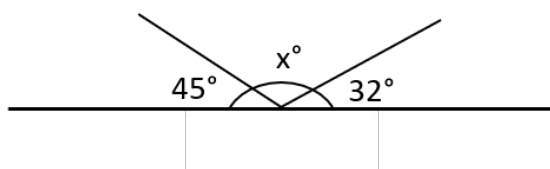
- 13.** Take a look at the right-angled triangle diagram below:



How large is the angle marked x° ?

- A** 60° **B** 50° **C** 35° **D** 30° **E** 45°

- 14.** What is the size of the missing angle?



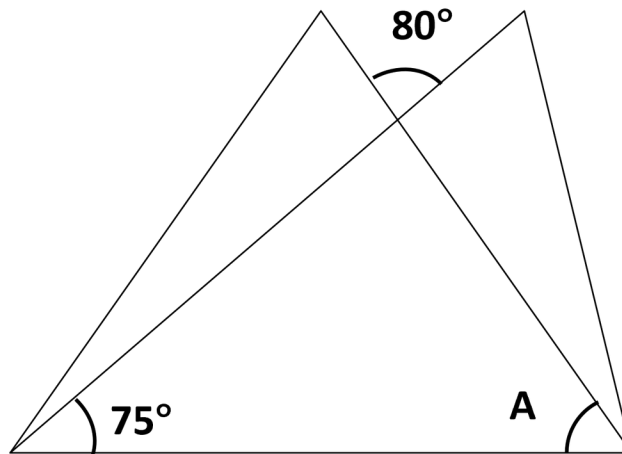
- A** 88° **B** 78° **C** 85° **D** 103° **E** 93°

- 15.** Susie has a compass and a fair coin.
 She tosses the coin.
 If the coin lands on Heads (H), she turns 45° anticlockwise.
 If the coin lands on Tails (T), she turns 45° clockwise.
 Susie got the result H,H,T,H,H when she tossed the coin 5 times.

If Susie was facing East, in which direction is she facing now?

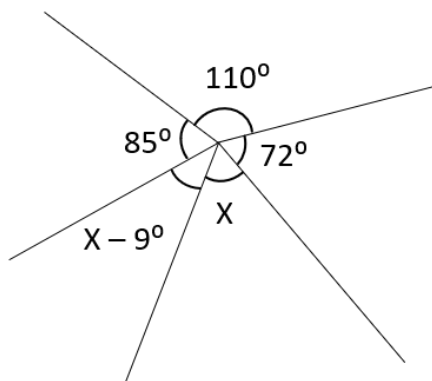
- A** North-West
- B** South-West
- C** North
- D** North-East
- E** West

- 16.** Find the size of angle A in the diagram below.



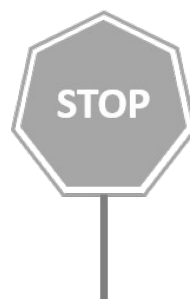
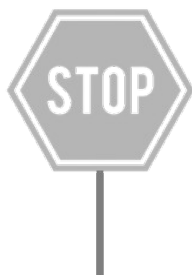
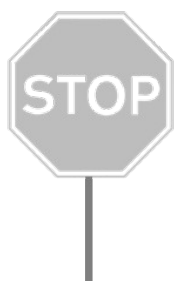
- A** 25°
- B** 30°
- C** 20°
- D** 35°
- E** 40°

- 17.** Find angle X in the figure below.



- A 48° B 22° C 51° D 42° E 41°

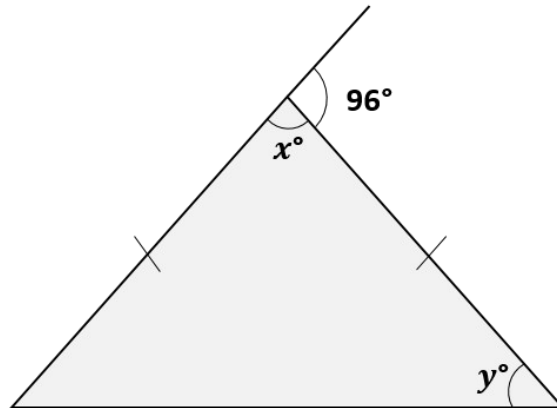
- 18.** A "STOP" sign was made in the shape of a regular polygon. The sum of all the angles in the sign sum to 1080° .



What is the name of the regular polygon?

- A Pentagon B Decagon C Heptagon D Octagon E Hexagon

- 19.** The following triangle is an isosceles triangle.



What is the value of the angle labelled x° ?

- A 4° B 264° C 90° D 74° E 84°

- 20.** What is the value of the angle labelled y° ?

- A 62° B 48° C 74° D 96° E 60°

- 21.** What will the time be in 147 minutes if it is 20:25 now?

- A 18:22 B 17:52 C 22:52 D 07:42 E 08:22

- 22.** The time difference between Chicago and London is 6 hours, so if it's 5:45 am in Chicago, it would be 11:45 am in London.
A TV programme starts at 3:00 pm in London and lasts 2 hours and 15 minutes.

When will the programme end in Chicago?

- A 10.30 am B 11.15 am C 9.00 am D 11.00 am E 10.45 am

23. The 2nd of March is a Thursday.

What day is the 9th of July?

- A Wednesday
- B Friday
- C Sunday
- D Thursday
- E Tuesday

24. A clock loses 5 minutes per hour. It showed the correct time on Monday 7:00 am.

What will this clock show on Tuesday 7:00 pm?

- A 4:30 pm B 10:00 pm C 3:30 pm D 2:30 pm E 4:00 pm

25. A rugby tournament consists of eight teams and four matches, each of which lasts 80 minutes.
Match 2 starts when Match 1 has 10 minutes to go.
There is a 15-minute break between the end of Match 2 and the start of Match 3.
Match 3 and Match 4 overlap by 30 minutes, and the Tournament ends when Match 4 finishes.

How long does the tournament last?

- A 260 mins B 335 mins C 325 mins D 320 mins E 295 mins

26. What is 4089.576 rounded to the nearest whole number?

- A 4089 B 4089.57 C 4089.5 D 4100 E 4090

- 27.** The weight of an elephant is 4,892 kg.
What is this to the nearest ten kg?
A 4,990 kg **B** 4,890 kg **C** 4,900 kg **D** 4,820 kg **E** 4,892 kg
- 28.** **What is 101.4215 rounded to 1 decimal point?**
A 101.4 **B** 101 **C** 100 **D** 101.42 **E** 102
- 29.** **Which of the following options is the best estimate for the below?**
$$(2.32 + 1.74) \times 9.67$$

A 20 **B** 10 **C** 30 **D** 40 **E** 45
- 30.** **What is 64.16 mm rounded to the nearest cm?**
A 60 cm **B** 64 cm **C** 6 cm **D** 6.1 cm **E** 7 cm
- 31.** Two whole numbers multiply together to make 96.
What is the smallest possible sum of the two numbers?
A 97 **B** 20 **C** 50 **D** 22 **E** 14

- 32.** Keith is organising a party.
He needs pizzas and burgers.
Pizzas are sold in packs of 6.
Burgers are sold in packs of 14.
He buys exactly the same number of burgers as pizzas.

What is the least number of pizza packs he buys?

- A** 8 **B** 2 **C** 7 **D** 3 **E** 9

- 33.** Which of the following is a factor of 595?

- A** 25 **B** 12 **C** 13 **D** 15 **E** 17

- 34.** Which options represent 180 as a product of its prime factors?

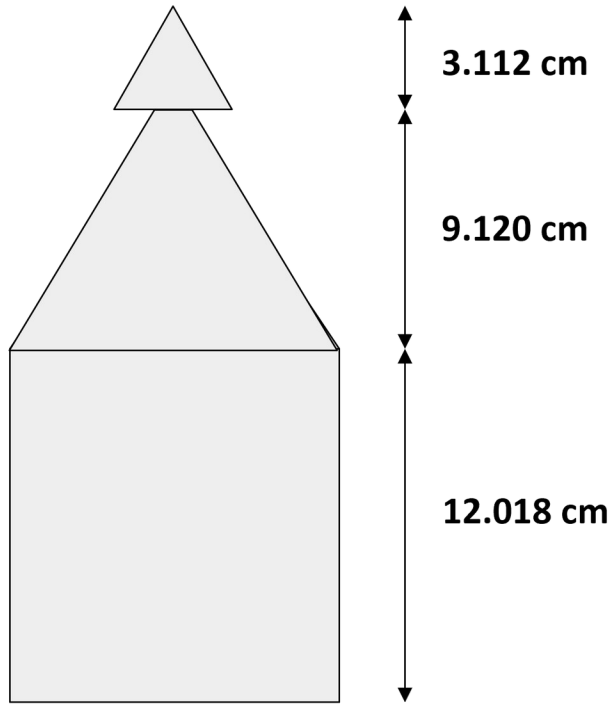
- A** $5 \times 4 \times 9$
B $5 \times 2 \times 3 \times 9$
C $5 \times 2^2 \times 3$
D $5 \times 2^2 \times 3^2$
E $5 \times 2 \times 3$

- 35.** Sam and Cam choose two numbers. The lowest common multiple of the two numbers is 24, the highest common factor is 4, and the difference is greater than 10.

What is the larger of the two numbers?

- A** 24 **B** 8 **C** 6 **D** 12 **E** 4

36. Find the height of the rocket shown below.



- A 34.250 cm
- B 24.204 cm
- C 24.232 cm
- D 24.250 cm
- E 24.150 cm

37. Find the value of the following expression:

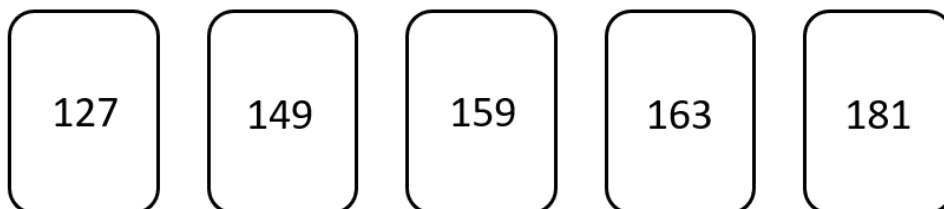
$$55 \div 11 \times 7 - 25 + 45$$

- A 55
- B 65
- C 45
- D 75
- E 46

- 38.** Gold costs about £1500 per centimetre cubed ($1 \text{ cm}^3 = £1500$)
How much does a gold bar that is 12.5 cm^3 cost?
A £30,000 **B** £15,000 **C** £18,750 **D** £24,000 **E** £16,400

- 39.** It takes a workman 12 minutes to lay each of the tiles in the above patio.
How much longer will it take him to lay the remainder of tiles?
A 6 hours **B** 4.5 hours **C** 5 hours **D** 8 hours **E** 9 hours

- 40.** If a card has a prime number on one side, it has a consonant on the other side, otherwise it has vowels on the back.



Which one of these cards doesn't have a consonant on the back side?

- A** 127 **B** 149 **C** 159 **D** 163 **E** 181

- 41.** What fraction of an hour is equal to 12 minutes?

- A** $\frac{1}{6}$ **B** $\frac{2}{5}$ **C** $\frac{1}{5}$ **D** $\frac{11}{20}$ **E** $\frac{4}{5}$

- 42.** Bella cuts her birthday cake into twelve equal pieces.

What percentage of the cake is three pieces?

A 20% **B** 15% **C** 30% **D** 25% **E** 35%

- 43.** In a purse, there are green, blue, and black pins.

$\frac{5}{8}$ of the pins are black and $\frac{1}{5}$ of the pins are green.

What fraction of the pins are blue?

A $\frac{11}{20}$ **B** $\frac{7}{40}$ **C** $\frac{1}{40}$ **D** $\frac{9}{40}$ **E** $\frac{5}{40}$

- 44.** Adam scored 80 on an English test.
Evan scored 20% less than Adam.
Joseph scored 25% less than Evan.

What is the combined score of Evan and Joseph?

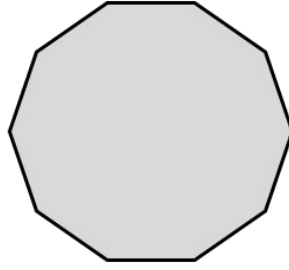
A 108 **B** 112 **C** 102 **D** 116 **E** 1100

- 45.** Amara goes on a hike to the top of Mount Snowdon.
For every 100 metres she climbs, the temperatures decreases by 1.2°C.
The temperature at the base of the mountain was 23°C.

What is the temperature after a long 600 metre hike?

A 13.8°C **B** 15.6°C **C** 14.88°C **D** 14.8°C **E** 15.8°C

- 46.** What is the name of the shape given below?



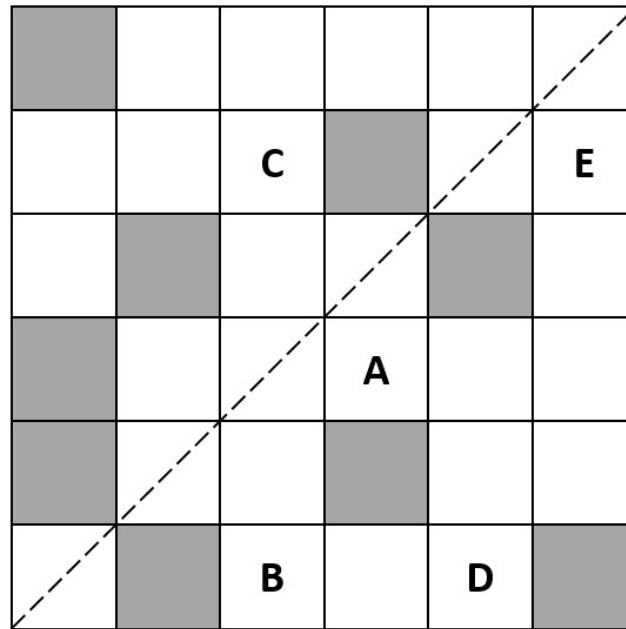
- A** Heptagon **B** Pentagon **C** Hexagon **D** Octagon **E** Decagon

- 47.** Mark leaves his home and travels 2 km north, then turns right and travels 4 km.
Then he turns left and walks 2 km more to reach his school.

In what direction is the school from Mark's house?

- A** West
B South
C North-East
D North-West
E East

48. Which tile must be shaded to make the image below symmetric?



A A

B B

C C

D D

E E

49. Which of these statements is false?

- A A kite has two pairs of equal sides
- B All sides of a rhombus are equal
- C A trapezium has two pairs of equal sides
- D All angles of a regular heptagon are equal
- E A parallelogram has two pairs of parallel lines

50. Which of the following does not have any lines of symmetry?

MUM
NUN
DID
HOB
BED

A MUM

B DID

C BED

D HOB

E NUN