



Answer Sheet

Paper Name: Maths-Mixed Set-3

Paper ID: CUSTOM-MA-6FB5E6BE96

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



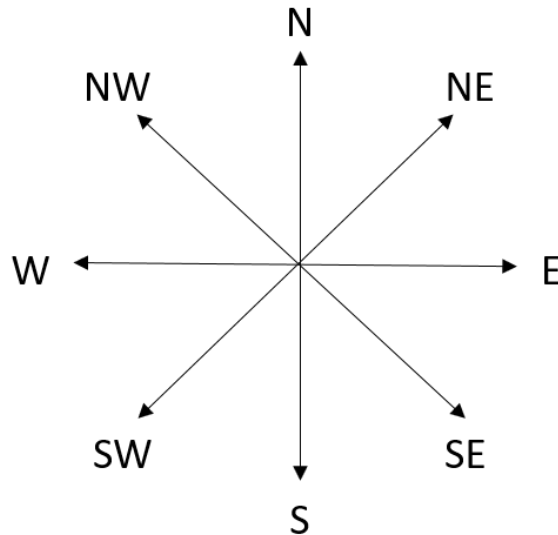
E

Use the **free Exam Happy app** to **view the average** for this paper and learn from **video solutions**

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
18	A	B	C	D	E
19	A	B	C	D	E
20	A	B	C	D	E
21	A	B	C	D	E
22	A	B	C	D	E
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
35	A	B	C	D	E
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.** The eight compass directions are shown below.
Joseph is facing east.
He turns 75° in a clockwise direction.



Which of the following directions is closest to Joseph's direction?

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

- 2.** What is the value of $0.0072 + 3.04 + 0.1756$?

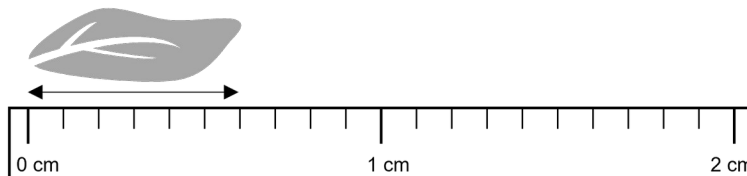
- A** 3.1868 **B** 3.5828 **C** 3.2228 **D** 3.2756 **E** 3.2876

- 3.** Jasmin scored 66 out of 75 in an English exam last week.

What percentage did Jasmin achieve?

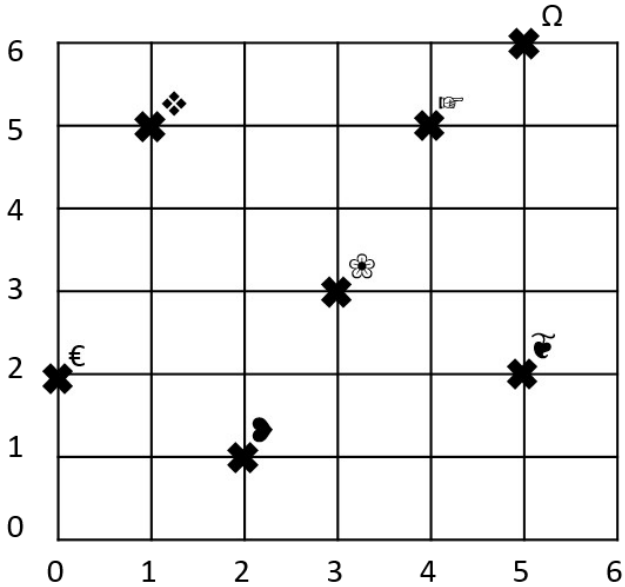
- A** 60% **B** 45% **C** 88% **D** 66% **E** 75%

- 4.** What is $\frac{2}{3}$ of 243?
A 69 **B** 103 **C** 73 **D** 162 **E** 81
- 5.** What is the product of the largest 1-digit number and smallest 2-digit number?
A 891 **B** 100 **C** 10 **D** 90 **E** 99
- 6.** A blacksmith works eight hours every day.
 To make a metal gate, the blacksmith needs 20 hours.
How many days will he need to work to make six gates?
A 8 days **B** 12 days **C** 16 days **D** 15 days **E** 14 days
- 7.** Using estimation, what is the value of $(33 \times 47 + 101) \div 21$ to the nearest whole number?
A 86 **B** 61 **C** 92 **D** 79 **E** 95
- 8.** Kofi is measuring the length of a small leaf.



- If this species of leaf can grow to 1.5 cm long, what percentage of its maximum size is Kofi's sample?**
A 30% **B** 45% **C** 25% **D** 40% **E** 60%

9. Take a look at the grid below:



What are the coordinates of the ♣ symbol?

- A (1, 6) B (3, 3) C (2, 5) D (5, 2) E (6, 2)

10. Which symbol is located at (2, 1)?

- A ♥ B € C ♠ D ♣ E Ω

11. 5 miles is approximately 8 km and the distance between Manchester to London is approximately 200 miles.

How quickly would you need to travel to reach London in 5 hours?

- A 44 km/h B 64 km/h C 40 km/h D 100 km/h E 58 km/h

- 12.** Timothy rides his electric scooter to school. The journey takes him 15 minutes and his school is 3400m from his house. What is Timothy's average speed?
- A** 12.6 km/h **B** 20.4 km/h **C** 13.8 km/h **D** 14.5 km/h **E** 13.6 km/h
- 13.** A bus completes its 16 km bus route in 1 hour 20 minutes. What is the average speed of the bus?
- A** 12 km/h **B** 16 km/h **C** 13 km/h **D** 20 km/h **E** 14 km/h
- 14.** Cheetahs are able to achieve a maximum speed of 130 km/h. If a cheetah runs at its maximum speed for 3 minutes, how much distance would it be able to cover?
- A** 7.0 km **B** 6.0 km **C** 5.5 km **D** 7.5 km **E** 6.5 km
- 15.** In just 85 minutes, Humza was able to drive to the seaside. Given the distance from his house to the seaside is 68 km, what was his average speed?
- A** 58 km/h **B** 56 km/h **C** 48 km/h **D** 60 km/h **E** 44 km/h
- 16.** It takes Mrs. Taylor 36 minutes to complete her morning commute to work. If her workplace is located 9 km away from her home, what is the average speed of her morning commute?
- A** 12 km/h **B** 16 km/h **C** 14 km/h **D** 18 km/h **E** 15 km/h

- 17.** Leah lives 12 km due north of Sam, who lives 4 km due south of Jan. Roughly, how long would it take to travel to Jan's house from Leah's house if travelling at an average speed of 36 km/h?
- A** 13 mins **B** 26 mins **C** 15 mins **D** 27 mins **E** 12 mins
- 18.** Harry's mum takes part in a walking group, who walk every day. On weekdays, they walk for 45 minutes at an average speed of 4 km/h. On weekends, they walk for 30 minutes at an average speed of 5 km/h. How much distance do they cover in total over one week?
- A** 25 km **B** 20 km **C** 15 km **D** 12 km **E** 16 km
- 19.** Roughly how long would it take to travel 40 km on the motorway if driving at an average speed of 70 km/h?
- A** 42 mins **B** 36 mins **C** 40 mins **D** 32 mins **E** 34 mins
- 20.** In a marathon, runners must run 42 km from start to finish. If a runner runs at an average speed of 8 km/h, how long does it take them to complete the marathon?
- A** 5 hours 20 mins
B 5 hours 25 mins
C 6 hours 15 mins
D 5 hours 15 mins
E 6 hours 20 mins

- 21.** Ellie likes collecting stamps.
10 out of every 12 stamps are 5p stamps.
The rest are 8p stamps.
Ellie has 54 8p stamps.

How many stamps does she have in total?

A 108 **B** 152 **C** 270 **D** 324 **E** 344

- 22.** What is the ratio of vowels to consonants in the word below?

PINEAPPLES

A 4:7 **B** 2:5 **C** 2:3 **D** 5:6 **E** 6:7

- 23.** The age of Tesla and Berry is 20 and 24 years.

In how many years from now will the ratio of the ages of Tesla and Berry be 6 : 7?

A 3 **B** 4 **C** 2 **D** 8 **E** 6

- 24.** Carlos puts numbers 2 to 25 (inclusive) into the following sorting table.

	Odd	Even
Prime	A	B
Composite	C	D

How many numbers are there in A, B, and C in total?

A 13 **B** 10 **C** 6 **D** 2 **E** 18

- 25.** During a sale, the price of a pair of boots was reduced by 15% to £51. What was the original price of the boots?

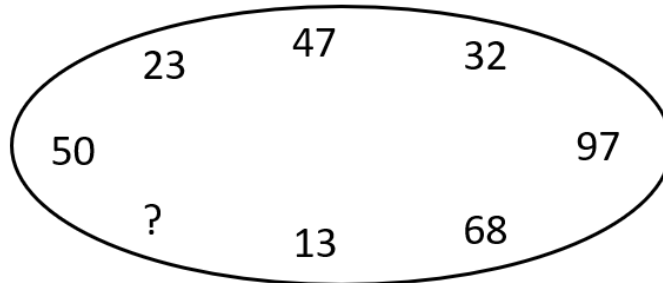
A £9 **B** £65 **C** £60 **D** £14 **E** £58

- 26.** What is the approximate value of the calculation below?

$$(47 + 12) \times (101 - 26) \div 21$$

A 210 **B** 280 **C** 290 **D** 256 **E** 240

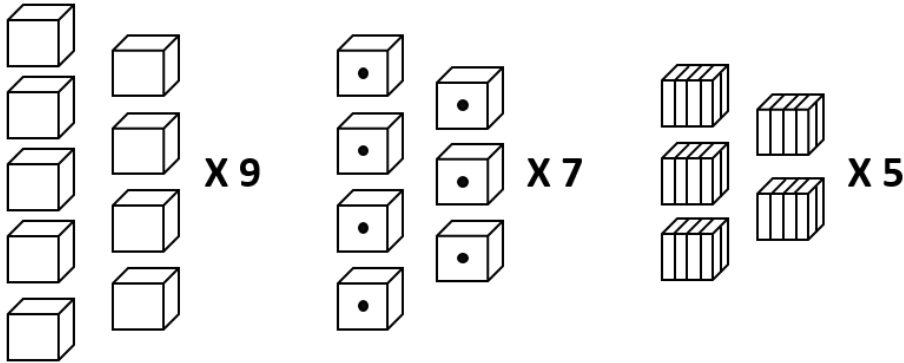
- 27.** Some numbers are given below.



If the mean of all the numbers is 42, what is the value of the missing number?

A 16 **B** 7 **C** 4 **D** 6 **E** 12

- 28.** 6 friends are picking cube blocks out of a hat for a game. There are 5 striped cubes, 7 dotted cubes, and 9 plain cubes. The first two friends pick out a striped cube each and the third friend picks out a plain cube.

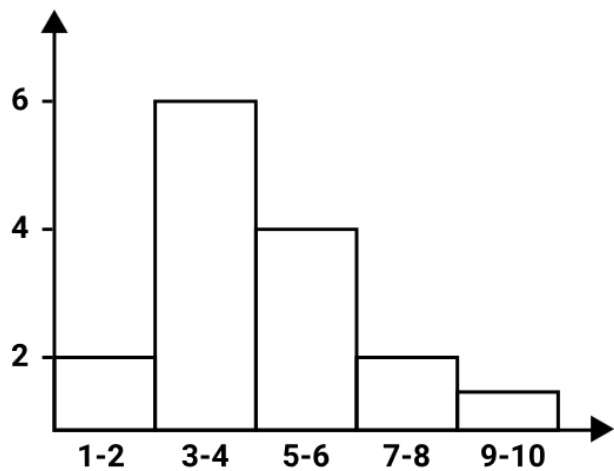


What is the probability of the fourth friend picking a striped cube?

- 29.** An unfair die is twice as likely to land on an even number than an odd. If the die was rolled 90 times, what is the expected number of times it will land on the number 6?

- A** $\frac{1}{9}$ **B** $\frac{1}{6}$ **C** $\frac{1}{3}$ **D** $\frac{2}{5}$ **E** $\frac{1}{18}$
- A** 12 **B** 15 **C** 10 **D** 20 **E** 18

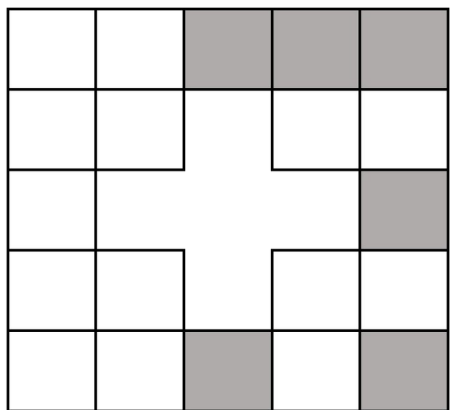
30. The bar chart shows children from class 5A grouped by the number of people living in their household.



How many children live in households with more than 6 people?

- A 2 B 8 C 6 D 3 E 7

31. What percentage of the large square is grey?



- A 60% B 30% C 25% D 35% E 24%

- 32.** For a specific day, \$1.20 = £1.
A trader purchases shares for \$150.

How many pounds are needed to buy these shares?

A £135 **B** £210 **C** £195 **D** £125 **E** £140

- 33.** The circumference of the table is 484 cm.

Hint: The circumference of a circle is the same as the distance around the outside.

How much space does each person sitting around a full table have?

A 80.6 cm **B** 242 cm **C** 181.5 cm **D** 180 cm **E** 60.5 cm

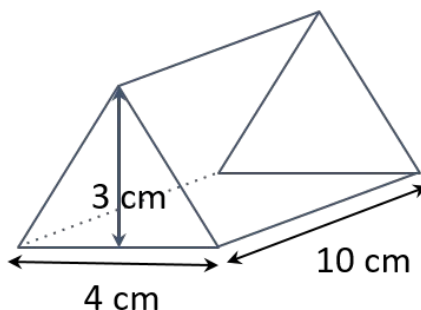
- 34.** Here is a list of digits: 5, 1, 3, 9, 7

Arrange the digits in ascending order and label it as number A.
Arrange the digits in descending order and label it as number B.

What is the difference between A and B?

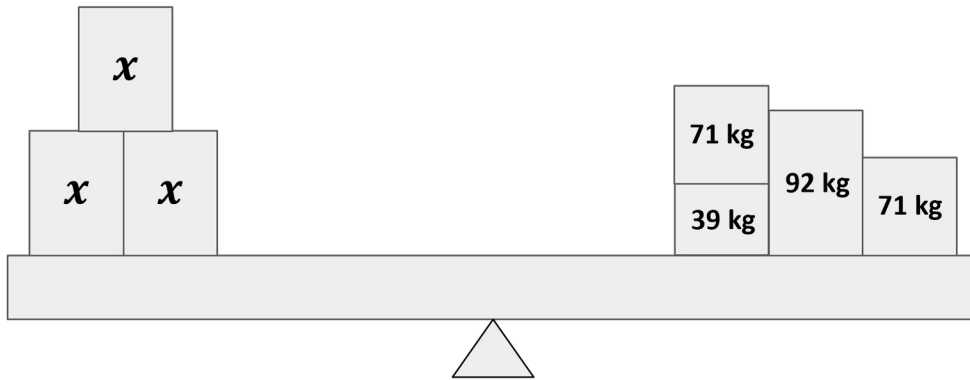
A 89,235 **B** 82,963 **C** 83,952 **D** 82,693 **E** 83,259

- 35.** Find the volume of the prism shown below.



A 120 cm³ **B** 30 cm³ **C** 40 cm³ **D** 60 cm³ **E** 80 cm³

- 36.** The see-saw below is balanced since the boxes on both sides are equal in mass. The three boxes on the left have the same mass of x kg.



What is the value of x ?

- A** 273 kg **B** 78 kg **C** 67 kg **D** 137 kg **E** 91 kg

- 37.** 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

- 38.** What is the value of the following expression when x is equal to 4?

$$8x + 2$$

- A** 26 **B** 86 **C** 24 **D** 34 **E** 18

- 39.** 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

- 40.** Palm trees grow at a rate of 5 cm every year until they are 16 metres tall.
After 16 metres, they get too heavy and start bending and get shorter at a rate of 3 cm every year.



How many years until Tree A overtakes Tree B in height?

- A** 210 years **B** 203 years **C** 105 years **D** 115 years **E** 209 years

- 41.** Andy is facing South.
He rotates 225° of a complete circle in the clockwise direction.

In which direction is he facing now?

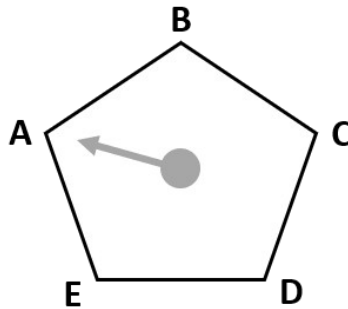
- A** South
B North
C West
D North East
E North West

42. What is the lowest common multiple of 48 and 54?

- A** 432 **B** 402 **C** 734 **D** 628 **E** 524

43. The spinner is pointing to one of the corners of the regular pentagon below.

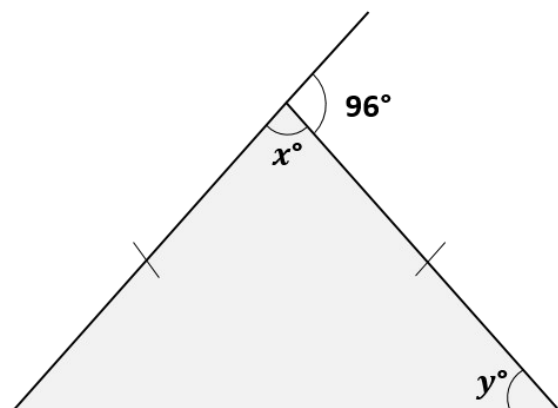
Sam spins the spinner as fast as he can, and it turns 432° clockwise.



Which corner is the spinner pointing towards after Sam spins it?

- A** A **B** B **C** C **D** D **E** E

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



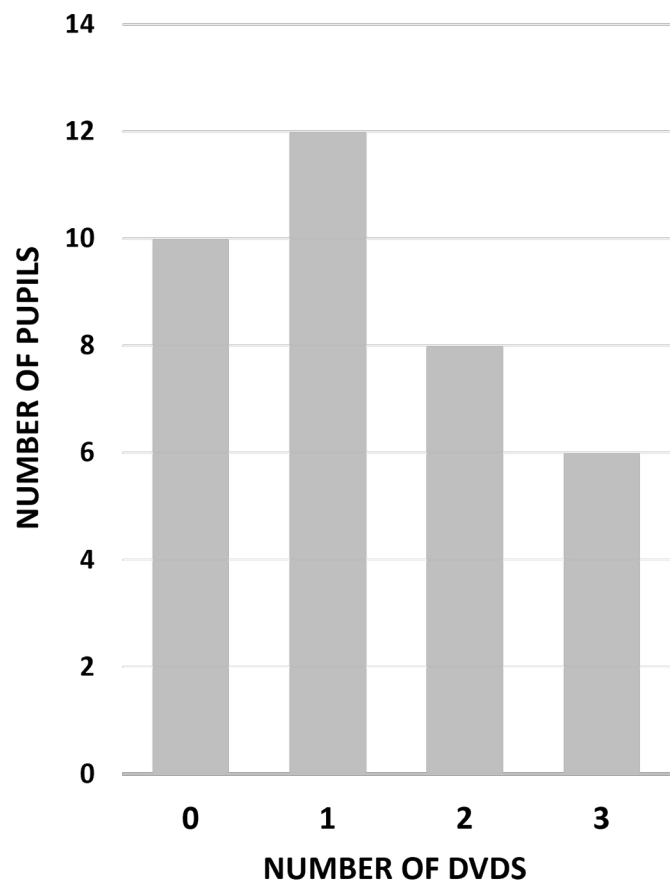
What is the value of the angle labelled x° ?

- A 4° B 264° C 90° D 74° E 84°

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

- A 62° B 48° C 74° D 96° E 60°

46. Below bar chart shows the number of pupils having a certain number of DVDs.

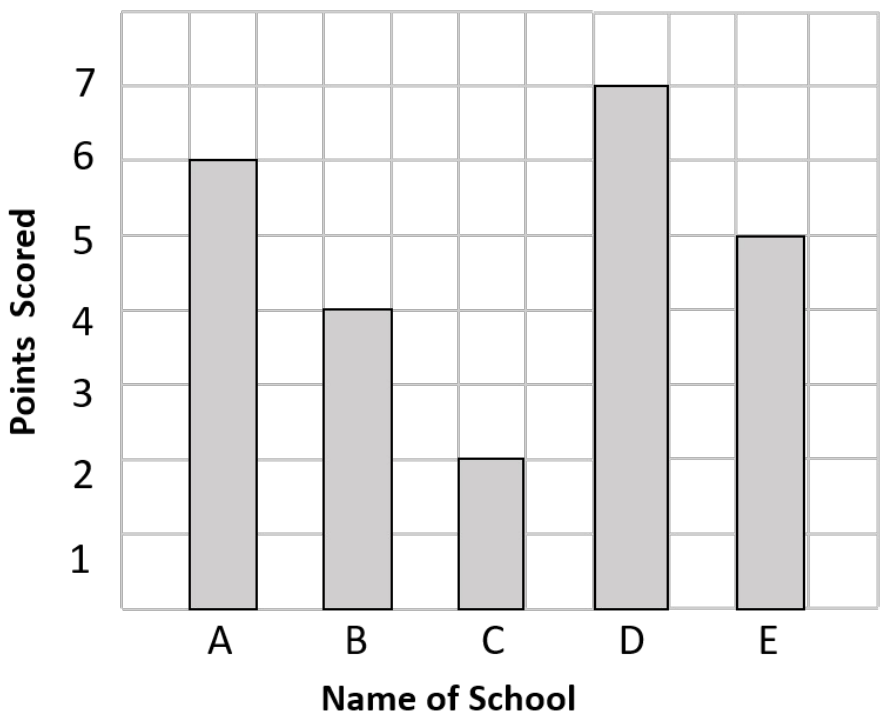


How many DVDs are there in total?

- A 44 B 40 C 38 D 42 E 46

47. Every school in Langley Town participates in a competition.

The bar graph below shows the number of points scored by each of the schools in a particular year.



What is the average number of points scored in the competition?

- A** 4.8 **B** 5.0 **C** 5.2 **D** 5.6 **E** 4.6

- 48.** Here is a bus timetable with some arrival times missing.

	Bobville	Squareford	Pantsbridge
Bus 1	08:35	09:02	09:40
Bus 2	9:05	09:20	?
Bus 3	?	09:45	10:18
Bus 4	09:55	-	11:05
Bus 5	10:05	10:16	10:46

Bus 2 takes twice as long to travel from Squareford to Pantsbridge as from Bobville to Squareford.

Bus 3 leaves Bobville 20 minutes after Bus 2.

Which bus takes the longest to travel from Bobville to Pantsbridge?

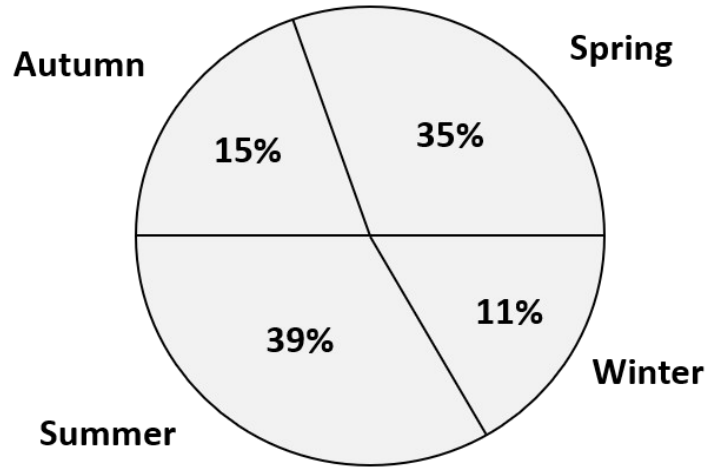
- A** Bus 1
- B** Bus 2
- C** Bus 3
- D** Bus 4
- E** Bus 5

- 49.** Gary, Giovanna, and Giles buy mangoes for 80p each.
 Gary buys 5 more mangos than Giovanna, and Giovanna buys 12 more mangos than Giles.
 Together they spend £35.20 on buying mangos.

How many mangos did Giovanna buy?

- A** 8
- B** 17
- C** 12
- D** 15
- E** 25

- 50.** 5,400 people took part in a recent survey which asked them what their favourite season is. The results are shown below:



How many people like Winter the most?

- A** 297 **B** 500 **C** 594 **D** 59 **E** 540