



Question 1

The chances of drawing a black or red marble from this jar are *not equally likely*.

Choose the jar for which this statement is true.

a.



a.



Question 2

True or false?

Eight students are taking part in a race.

There is an equal chance of any one of them winning.

- a. True
- b. False

Question 3

To choose the class leader each week the teacher draws the name of a class member out of a bag.

The teacher does not return the names to the bag.

As the year goes on, and Glenn has not yet been chosen, his chance of being class leader:

- a. increases
- b. decreases
- c. stays the same

Question 4

The probability of having a full moon on your birthday is:

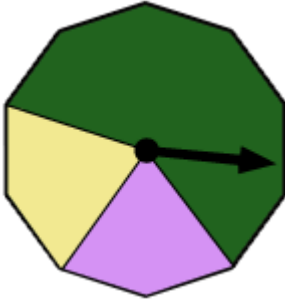
- a. likely
 - b. a 50–50 chance
 - c. unlikely
 - d. impossible
-

Question 5

Enter a number.

Impossible events have a probability of .

Question 6



True or false?

There are three colours on this spinner so the probability of landing on green is $\frac{1}{3}$.

- a. True
 - b. False
-

Question 7



A coin is tossed three times and each time it lands on a head.

What is the probability that the next throw will be a tail?

- a. Less than a half
 - b. More than a half
 - c. Exactly a half
-

Question 8

There is a $\frac{4}{5}$ chance of a spinner landing of red.

You would say that landing on red is:

- a. impossible
 - b. unlikely
 - c. fifty-fifty
 - d. likely
 - e. certain
-

Question 9



The probability of randomly taking a black marble from this jar is:

a. $\frac{1}{8}$

b. $\frac{1}{4}$

Question 10

Gill works out that the chance of getting a seat on the bus to school is $\frac{4}{10}$.

This is the same as a chance of:

a. $\frac{2}{5}$

b. $\frac{2}{8}$

Question 11

In a bag of marbles, 30% are red and 10% are blue.

What is the chance of randomly picking a marble that is either red or blue?

%

Question 12

Discs labelled with the numbers 1 to 20 are placed in a bag and one disc is drawn out at random.

The chance of the disc showing a number that is a *multiple of 4* is:

a. $\frac{1}{20}$

a. $\frac{1}{5}$

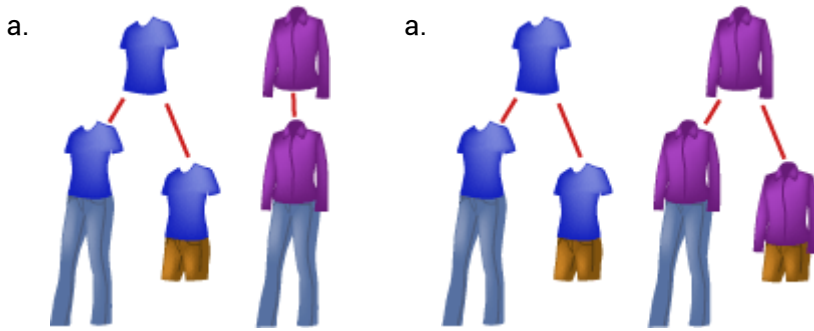
a. $\frac{1}{4}$

a. $\frac{3}{10}$

Question 13

You have two different tops and two types of pants.

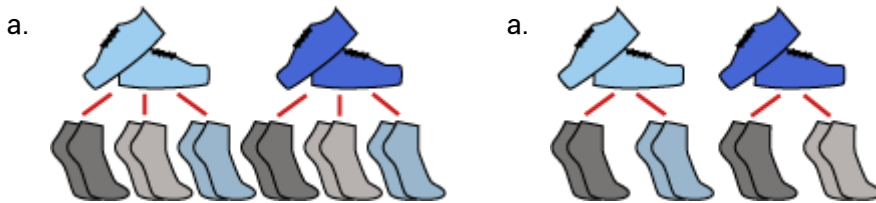
Choose the diagram that shows all the possible outfits.



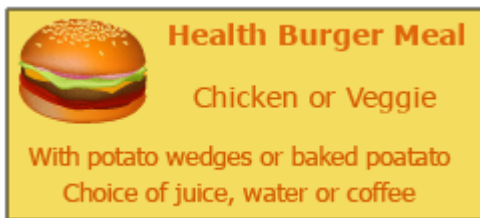
Question 14

Joe has 2 pairs of sports shoes and 3 pairs of socks.

Choose the diagram that shows all the possible combinations of shoes and socks Joe can have.



Question 15



The Health Burger Meal offers different combinations.

Question 16

In a chess tournament each player has to play every other player once.

If there are 5 players, how many matches will be needed?

matches

Question 17



What number does these tally marks represent?

Question 18

Eye colour	Frequency
Blue	12
Brown	24
Green	10

How many people were surveyed altogether?

Question 19

Students in class 5M received these marks in a spelling test.

4, 5, 2, 6, 3, 3, 5, 1, 3, 4,
5, 5, 5, 3, 6, 1, 1, 3, 1, 5

The frequency table would show scores from 1 to .

Question 20

A die was tossed thirty times and the frequency of the each result was recorded.

Complete the table if the scores 3 and 4 occurred the same number of times.

Score	Frequency
1	2
2	4
3	<input type="text"/>
4	<input type="text"/>
5	5
6	7

Question 21

True or false?

The mean is always exactly half-way between the bottom and the top score.

- a. True
- b. False

Question 22



What is the mean of the numbers on these cards?

Mean =

Question 23

Tanya gathered information from everyone in her class about the number of pets in their families.

She then did the following calculation to work out the mean.

$$\begin{aligned} \text{Mean} &= 78 \div 25 \\ &= 3.12 \end{aligned}$$

How many pets were there altogether?

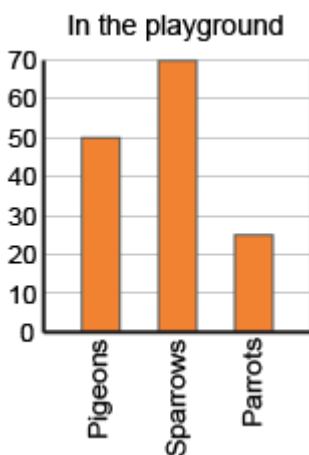
Number of pets =

Question 24

The mean of three numbers is 15.

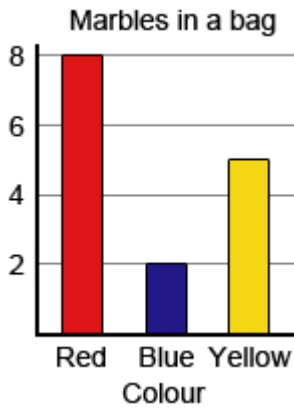
If two of the numbers are 11 and 20, what is the third number?

Question 25



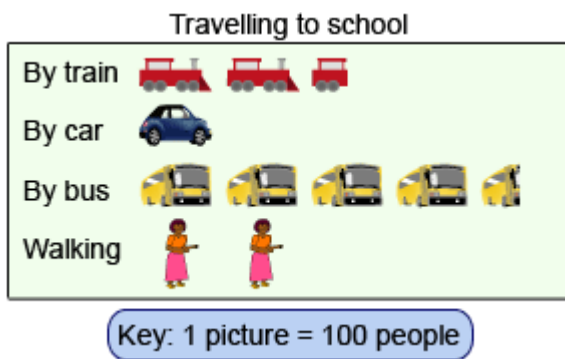
How many pigeons were in the playground?

Question 26



How many yellow marbles were in the bag?

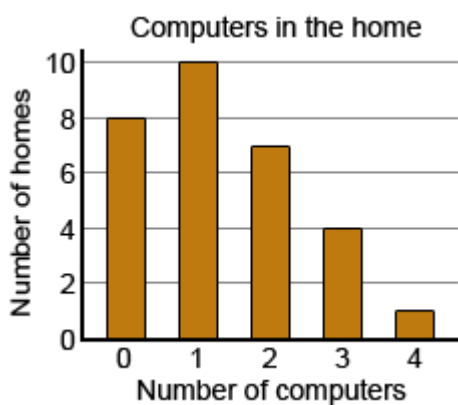
Question 27



This graph includes all the students at the school.

How many students go to the school?

Question 28



A class was asked to record the number of computers in their homes.

The results are shown in the graph.

How many *computers* were there altogether?

Question 29

In a divided bar graph, the whole bar represents:

- a. 50% of everything
 - b. 100% of everything
-

Question 30

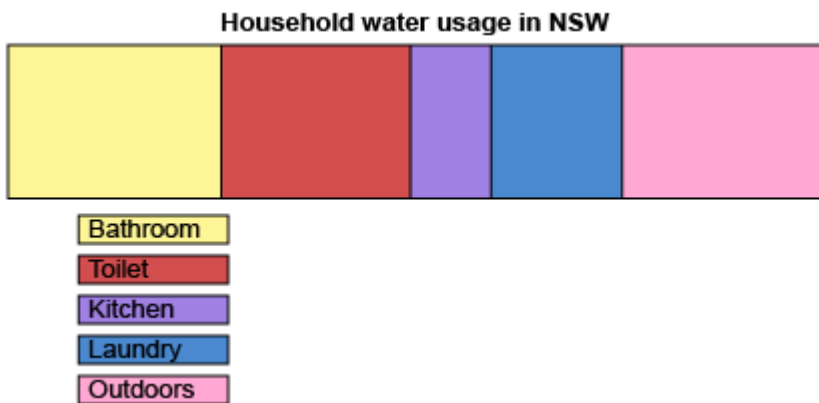
This graph represents the number of animals seen on a walk in the mountains.



If 20 reptiles were seen, about how many mammals were seen?

- a. 35
 - b. 20
 - c. 15
-

Question 31



If 500 L of water was used outside, how much was used in the bathroom?

- a. About 500 L
 - b. About 200 L
 - c. About 1000 L
-

Question 32

The different number of coloured lollies in a packet were recorded and made into a bar graph.

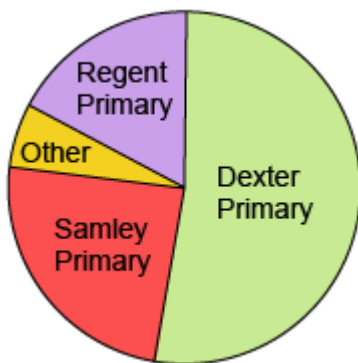


A lolly was picked at random from the bag.

Which of these statements is true?

- a. It is much more likely to be white than green.
- b. It is equally likely to be any colour.
- c. It is certain to be pink, yellow or orange.
- d. It is about twice as likely to be orange as yellow.

Question 33



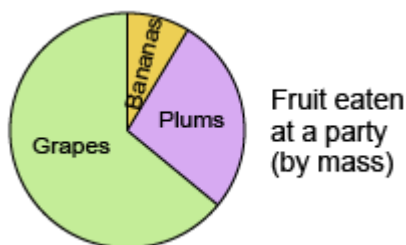
This graph shows the primary schools previously attended by Wenty High School students.

Compare the sectors for Samley and Regent.

Which statement is true?

- a. More students went to Samley than Regent.
- b. More students went to Regent than Samley.

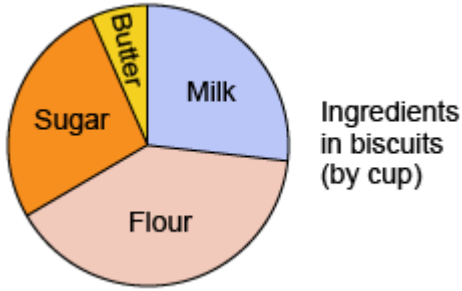
Question 34



What was the *most* popular fruit?

- a. Grapes
 - b. Plums
 - c. Bananas
-

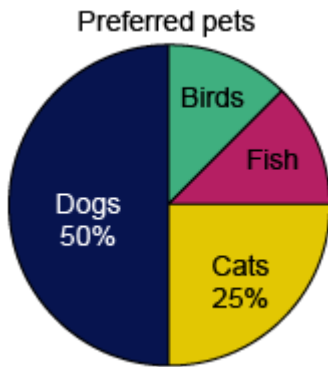
Question 35



If you use half a cup of butter, how many cups of milk should you use?

- a. half a cup
- b. 1 cup
- c. 2 cups
- d. 4 cups

Question 36

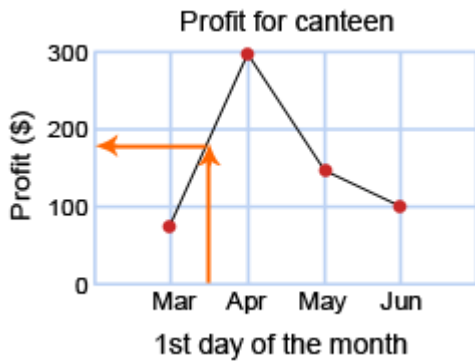


An equal number of students preferred birds and fish.

What percentage of the students chose birds?

%

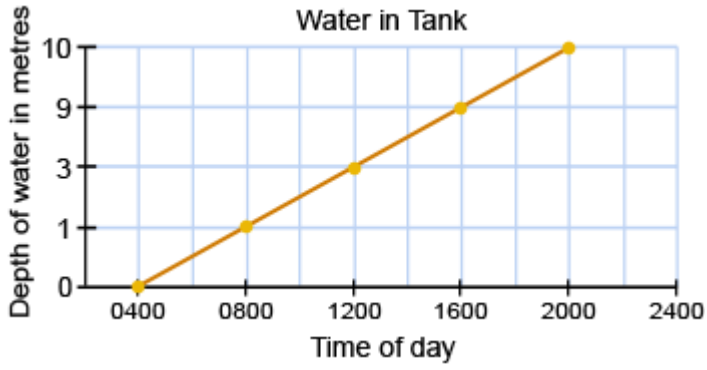
Question 37



Halfway through March, the profit was about:

- a. \$100
- b. \$180

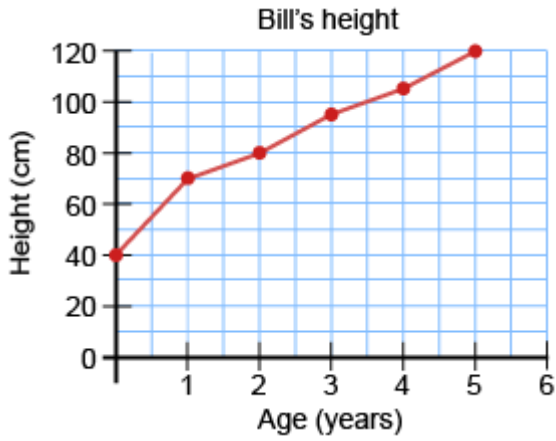
Question 38



What is wrong with this graph?

- a. The lines between the points don't make sense.
- b. The labels on the axes are wrong.
- c. The vertical scale is not in equal jumps.

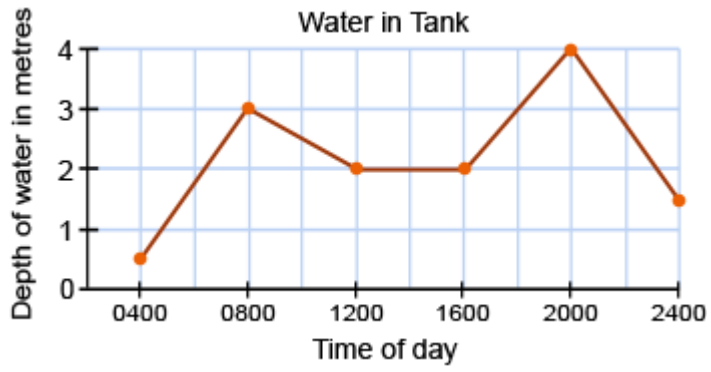
Question 39



How high did Bill grow between the ages of 1 and 2?

cm

Question 40



At what time was the tank full?

- a. At 8 am because the line has reached the top of the graph.
 - b. At 8 pm because the line has reached the top of the graph.
 - c. You cannot tell because you are not told how much the tank can hold.
-