

Name: _____

PIE CHARTS



1. Favourite School Subjects

A class of 40 students were asked about their favourite school subject. Their responses are represented in the pie chart below.

a) How many students chose Maths as their favourite subject? 40% of 40

$$\begin{array}{l} 10\% \text{ of } 40 \rightarrow 4 \\ \text{So } 40\% \text{ of } 40 \rightarrow 16 \end{array} \quad \begin{array}{l} \times 4 \\ \times 4 \end{array} \quad \underline{\underline{16}}$$

b) How many students chose Science as their favourite subject?

$$\begin{array}{l} 25\% = \div 4 \\ 40 \div 4 = 10 \end{array} \quad \underline{\underline{10}}$$

c) How many **more** students chose English than Art?

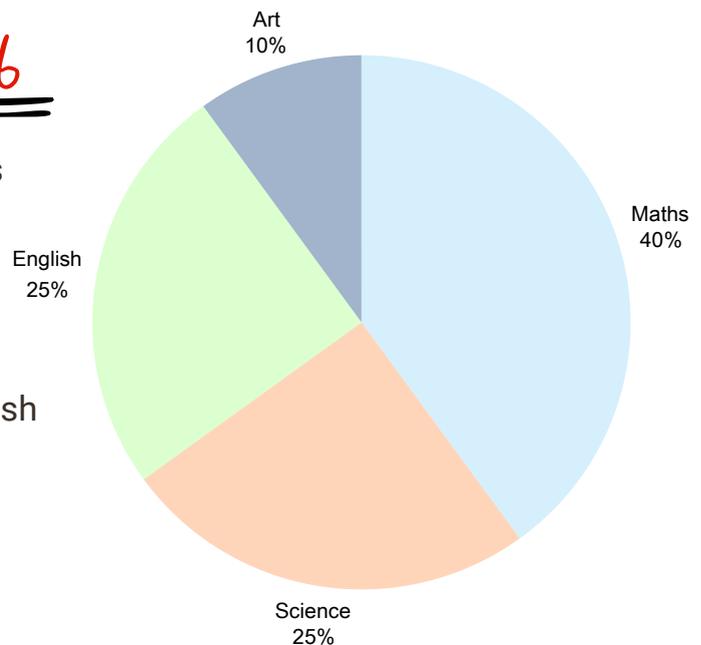
$$\begin{array}{l} \text{English} = 10 \\ \text{Art} = 4 \\ \text{Ans} = 6 \end{array}$$

d) How many students who chose **Art** or **English** would need to change their favourite subject to **Science** in order to make Science the most popular subject?

Most popular - Maths - 16

Science 10 students

So 7 students from Art or English would need to change to Science.



Name: _____

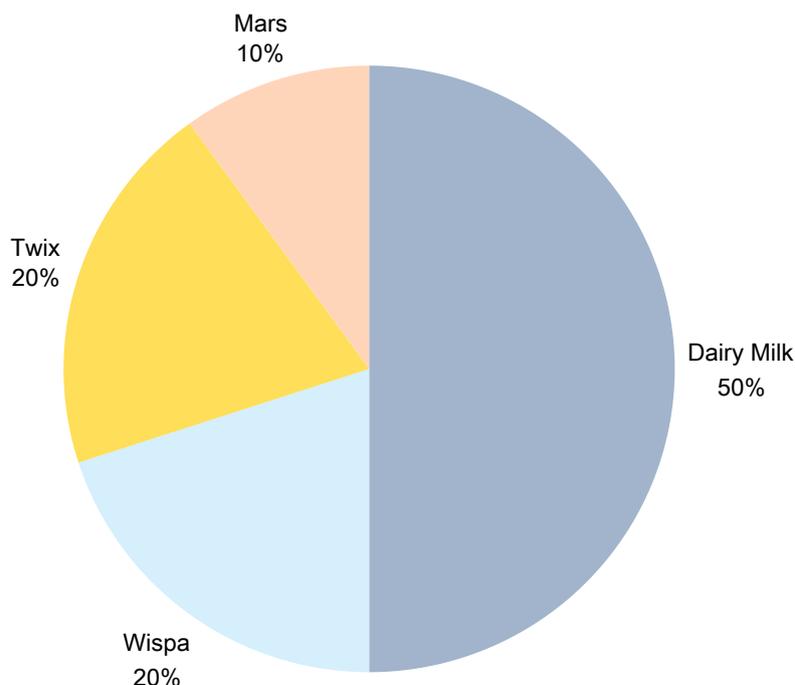
PIE CHARTS



2. Favourite Chocolate

A total of **40 students** were surveyed about their favourite chocolate bar. The results are shown in the pie chart below. Use the information provided to decide whether the following statements are **True** or **False**.

- a) Half of the students chose Dairy Milk as their favourite chocolate bar. True
- b) The number of students who preferred Twix and Wispa combined is equal to the number of students who chose Dairy Milk. False
- c) Twice as many students chose Twix compared to Mars. True
- d) 8 students chose Mars as their favourite chocolate bar. 10% of 40 is 4 so False
- e) 8 students chose Wispa. True
- f) If the total circle is 360° , the Dairy Milk portion represents 180° True



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PIE CHARTS



3. Favourite Hobby

A total of **60 students** were surveyed about their favourite hobbies. The results are shown in the pie chart to the right. Use the information provided to answer the questions below:

a) How many students chose **Sport** as their favourite hobby? $50\% \text{ of } 60 = \underline{\underline{30}}$

b) If **15%** of students enjoy watching **TV**, how many students does that represent? $15\% \text{ of } 60$

$$\left. \begin{array}{l} 10\% \text{ of } 60 = 6 \\ 5\% \text{ of } 60 = 3 \end{array} \right\} \underline{\underline{9}}$$

c) How many students chose **Sport** and **TV** combined?

$$30 + 9 = \underline{\underline{39}}$$

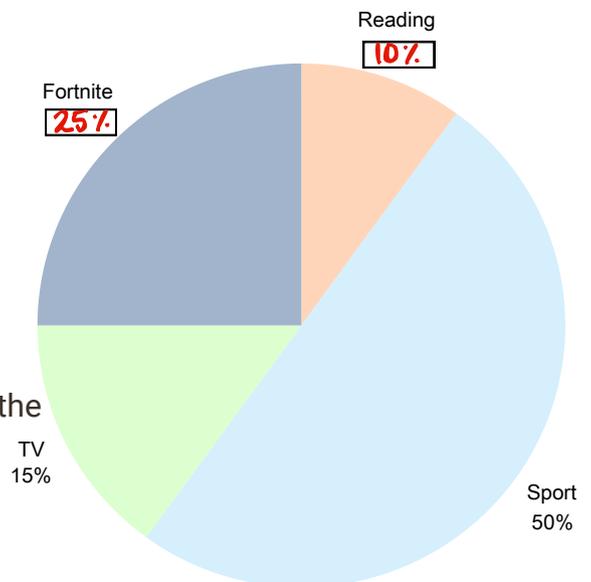
d) **6 Students** chose **Reading** - what is the **difference** in the number of students who chose **Reading** and **TV**

$$\left. \begin{array}{l} \text{TV} = 9 \\ \text{Reading} = 6 \end{array} \right\} \underline{\underline{\text{Ans} = 3}}$$

Stretch

e) There are **60 students** in total. If **15** students chose **Fortnite** and **6** students chose **Reading**, complete the pie chart by calculating and filling in the missing percentages.

$$\begin{array}{l} \text{Fortnite} = 25\% \\ \text{Reading} = 10\% \end{array}$$



How can you check that your answer is correct? 🤔

Pie chart needs to equal 100%.

$$\underline{50\% + 25\% + 15\% + 10\% = 100\%}$$
$$100\% = 100\% \checkmark$$