

Interpreting pie charts & pictograms



Read the percentages and keys carefully before you calculate.

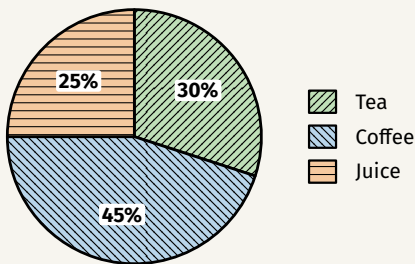
Name _____

Date _____

Reading pie charts and pictograms

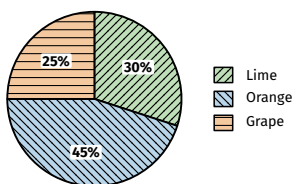
A pie chart's sectors show percentages of a total – multiply the percentage by the total to find an actual amount. A pictogram's key tells you how many units one whole icon stands for; a half icon stands for half that many.

Worked example This pie chart shows a survey of 40 students. What percentage chose Coffee, and how many students is that?



Coffee = 45% of the survey.
 $45\% \text{ of } 40 = 0.45 \times 40 = 18 \text{ students.}$

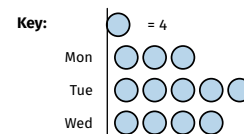
1. What percentage chose Orange?



Solution

Read the Orange sector.
= 45%

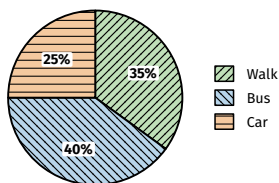
2. The pictogram shows books borrowed. How many were borrowed on Wednesday?



Solution

Wed = 4 icons.
 $4 \times 4 = 16 \text{ books}$

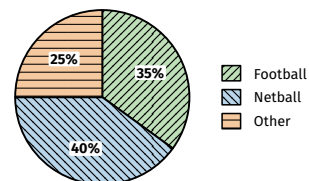
3. Which is the most common way to travel?



Solution

Largest sector is Bus
(40%).

4. This pie chart shows 200 students. How many chose Netball?



Solution

40% of 200
= 80 students

Interpreting pie charts & pictograms (continued)

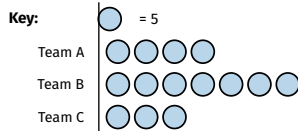


Read the percentages and keys carefully before you calculate.

Name _____

Date _____

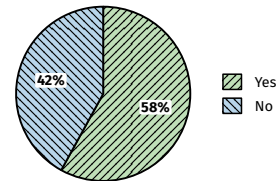
5. The pictogram shows medals won. How many medals did Team B win?



Solution

Team B = 7 icons.
 $7 \times 5 = 35$ medals

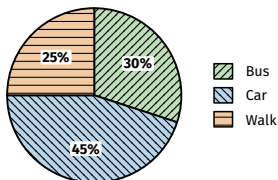
6. What percentage said No?



Solution

Read the No sector.
= 42%

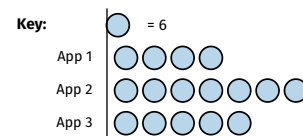
7. This pie chart shows 280 people. How many travel by Car?



Solution

45% of 280
= 126 people

8. The pictogram shows app downloads. How many downloads did App 1 and App 3 have together?



Solution

$24 + 30$
= 54 downloads

Interpreting pie charts & pictograms (continued)

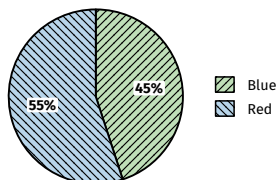


The angle of a sector is its fraction of the data $\times 360^\circ$.

Name _____

Date _____

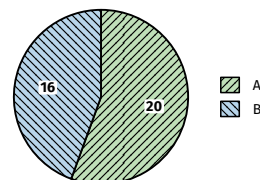
9. Calculate the angle of the sector for Blue.



Solution

$$45\% \times 360^\circ = 162^\circ$$

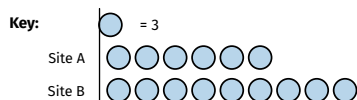
10. This pie chart shows raw counts. Find the total, then the angle of sector A.



Solution

$$\begin{aligned} \text{Total} &= 36; \\ 20/36 \times 360^\circ &= 200^\circ \end{aligned}$$

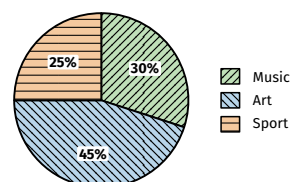
11. The pictogram shows trees planted. How many more trees at Site B than Site A?



Solution

$$\begin{aligned} 27 - 18 \\ = 9 \text{ more trees} \end{aligned}$$

12. This pie chart shows 360 people. How many chose Art?



Solution

$$\begin{aligned} 45\% \text{ of } 360 \\ = 162 \text{ people} \end{aligned}$$

Interpreting pie charts & pictograms (continued)



The angle of a sector is its fraction of the data $\times 360^\circ$.

Name _____

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13. A pie chart sector has an angle of 90° . What percentage does it represent?

Solution

$$90 \div 360 \times 100 \\ = 25\%$$

14. A survey of 96 people is shown in a pie chart. One sector has an angle of 60° . How many people does this sector represent?

Solution

$$60 \div 360 \times 96 \\ = 16 \text{ people}$$

15. A pie chart shows 3 categories: 38%, 27%, and an unknown percentage. What is the unknown percentage?

Solution

$$100 - 38 - 27 \\ = 35\%$$