

Equivalent fractions, decimals and percentages

Complete the tables.

	Percentage	Common fraction, hundredths	Common fraction, simplified
1	15%	$\frac{15}{100}$	
2	75%		
3	25%		
4	90%		
5	20%		

	Decimal	Common fraction, hundredths	Common fraction, simplified
6	0.75		
7	0.20		
8	0.4		
9	0.05		
10	0.95		

Simplify the fractions to complete these equations.

- 11  $\frac{25}{75} \times 24 = \underline{\quad} \times 24 = 8$
- 12  $\frac{25}{30} \times 2 = \underline{\quad} \times 2 = 1\frac{2}{3}$
- 13  $\frac{7}{14} \times 8 = \underline{\quad} \times 8 = 4$

Write the answers.

- 14  $\frac{18}{24} \times 4 = \frac{3}{4} \times 4 = \underline{\quad}$
- 15  $\frac{8}{12} \times 6 = \frac{2}{3} \times 6 = \underline{\quad}$

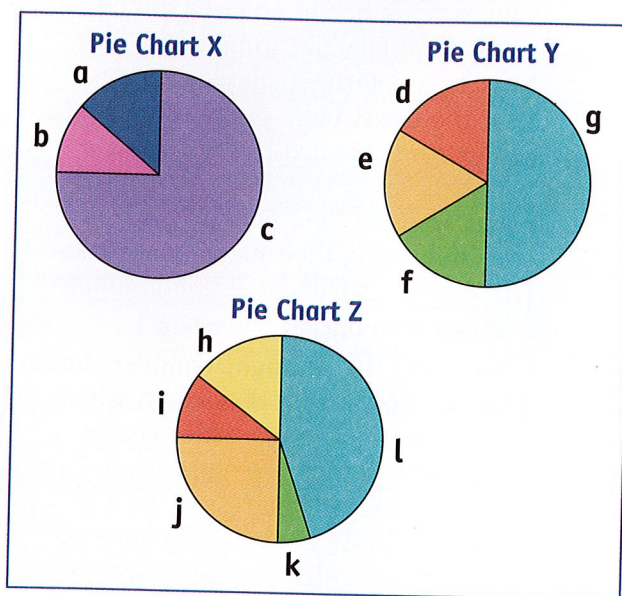


Score 2 points for each correct answer!

SCORE /30 0-12 14-24 26-30

Pie charts

These pie charts have not had the values added but they have been labelled a to k. Use them to answer the following questions.



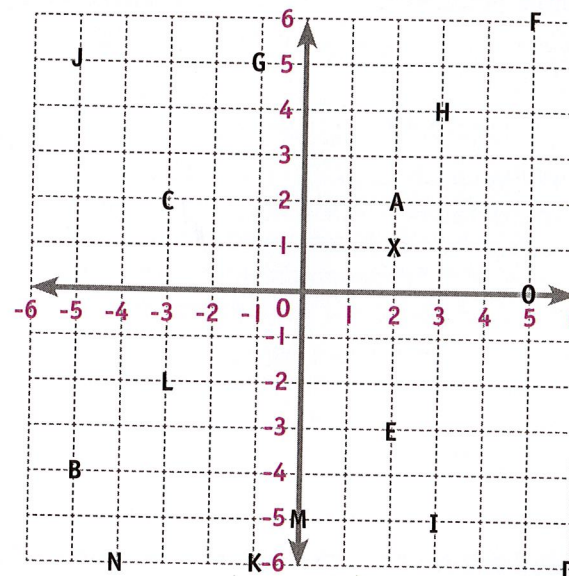
- 1 Which value is 50% of the total?  
\_\_\_\_\_
- 2 Which pie chart is most likely to be referring to the seasons of the year?  
\_\_\_\_\_
- 3 Which value is 5%? \_\_\_\_\_
- 4 Which value is 45%? \_\_\_\_\_
- 5 Which value is approximately 150, if the total of that pie chart is 200?  
\_\_\_\_\_
- 6 Which pie chart is most likely related to the weekdays, Monday to Friday?  
\_\_\_\_\_
- 7 If j is 30, what is the total of Pie Chart Z?  
\_\_\_\_\_
- 8 If f is 5, what is g? \_\_\_\_\_
- 9 If c is 120, what is a and b combined?  
\_\_\_\_\_
- 10 Which pie chart has the most equal parts?  
\_\_\_\_\_
- 11 If k is 75, what is i? \_\_\_\_\_
- 12 Which of all the values is 75%? \_\_\_\_\_

Score 2 points for each correct answer!

SCORE /24 0-10 12-18 20-24

Using the Cartesian coordinate system

The Cartesian coordinate system is used to plot points, as shown on the grid below. First you read along the horizontal axis, then you read along the vertical axis. So to plot point X at (2, 1), start at 2 on the horizontal axis and move up 1.



- 1 What letter is at coordinates (2, 2)?  
\_\_\_\_\_
- 2 What letter is at coordinates (3, 4)?  
\_\_\_\_\_
- 3 What letter is at coordinates (-3, 2)?  
\_\_\_\_\_
- 4 What letter is at coordinates (-4, -6)?  
\_\_\_\_\_
- 5 What letter is at coordinates (2, -3)?  
\_\_\_\_\_
- 6 What letter is at coordinates (5, 0)?  
\_\_\_\_\_
- 7 What letter is at coordinates (-5, -4)?  
\_\_\_\_\_

Write the coordinates of these letters.

- 8 J \_\_\_\_\_
- 9 D \_\_\_\_\_
- 10 L \_\_\_\_\_
- 11 K \_\_\_\_\_
- 12 M \_\_\_\_\_
- 13 G \_\_\_\_\_
- 14 F \_\_\_\_\_
- 15 I \_\_\_\_\_

Score 2 points for each correct answer!

SCORE /30 0-12 14-24 26-30

A pie chart had 20% coloured yellow, 30% coloured blue and 15% coloured red.

- 1 If the pie chart represented a total of 200 roses, how many roses did the blue section show?  
\_\_\_\_\_
- If the last colour in the pie chart was green, how many roses did green represent?  
\_\_\_\_\_
- 2 If the pie chart represented a total of 500 daffodils, how many daffodils did the red and yellow sections combined represent?  
\_\_\_\_\_
- 3 If the pie chart was about a total of 150 daisies, which colour represented 45 daisies?  
\_\_\_\_\_



Use the Cartesian grid in Measurement & Geometry to answer the following questions.

For these questions, each grid square represents 1 cm<sup>2</sup>.

- 4 If you drew a straight line between coordinates (3, 3) and coordinates (3, -4), how long would it be?  
\_\_\_\_\_
- 5 If you drew a straight horizontal line 7 cm long from coordinates (5, -4), at what coordinates would it end?  
\_\_\_\_\_
- 6 If you drew a straight vertical line 11 cm long from coordinates (-6, 5), at what coordinates would it end?  
\_\_\_\_\_
- 7 How many centimetres apart are the letters C and L?  
\_\_\_\_\_
- 8 What is the smallest number of straight lines you need to get from letter E to letter C, without crossing over another letter?  
\_\_\_\_\_