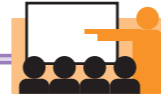


Division problems with remainders

At Level 3, some division problems will have remainders. You have to work out if the answer needs to be rounded up or not.



Let's practise!



Question: Kim has 24 stickers. She can fit five stickers on every page in her book. How many pages will she need for her animal stickers?

<p>1 Read the question, then read it again. What are you being asked to do?</p> <p>2 What type of calculation are you being asked to work out?</p> <p>3 Picture the numbers.</p> <p>4 How many stickers will fit on a page?</p> <p>5 How many pages can she fill?</p> <p>6 What happens to the ones left over? Do we need to round up the answer?</p> <p>7 How many pages does she need altogether?</p> <p>8 Check your answer.</p>	<p>Find the number of pages needed for 24 stickers.</p> <p>$24 \div 5$</p> <p>24 is close to 25. $25 \div 5 = 5$</p> <p>You need 5 stickers to fill a page.</p> <p>She has 24 stickers. $4 \times 5 = 20$ so she can fill 4 pages and she will have 4 stickers left.</p> <p>They need to be stuck on a page as well, so she needs one extra page. We round the answer up 1.</p> <p>$4 + 1 = 5$ pages.</p> <p>From step 3, we can see our answer is correct.</p>
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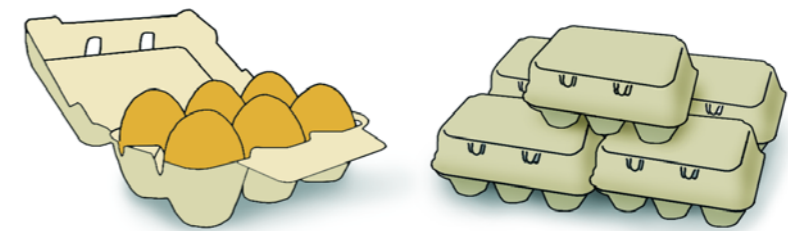


TIPS With division problems, always check whether the answer needs to round up one when there are things left over. If five people can travel in a car, you need three cars for twelve people – or some people will be left behind! It can help to draw the problem.

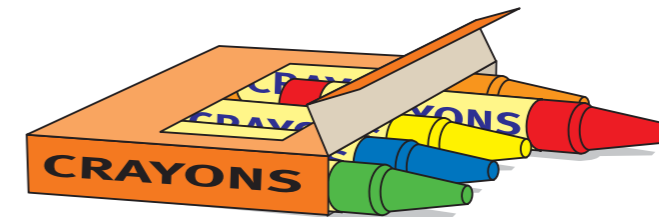
Practice questions



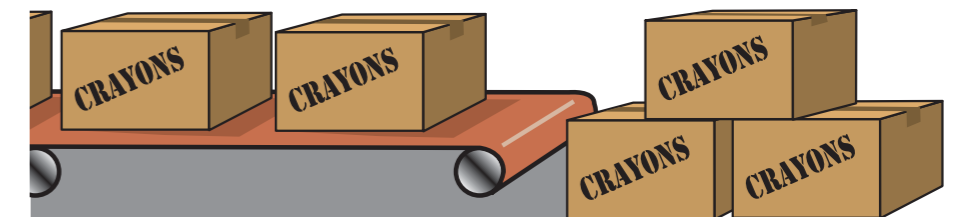
1 Six eggs fit into an egg box. How many boxes will you need for 26 eggs?



2 Ten crayons fill a pack. How many packs can you fill with 45 crayons?



3 Every box of crayons holds five packs. How many boxes are needed for 52 packs?



4 A coach can carry 50 passengers. There are 280 people going on the club outing. How many coaches will the organiser need to book?



5 Chocolate biscuits are sold in packs of eight. There are 35 children in the class. Mrs Bee gives everyone a chocolate biscuit.

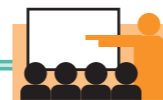
a) How many packs did she need to buy?

b) How many biscuits did she have left over?

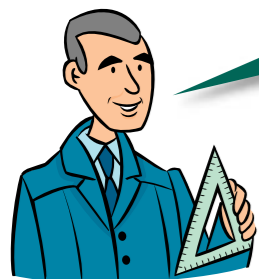


3D shapes

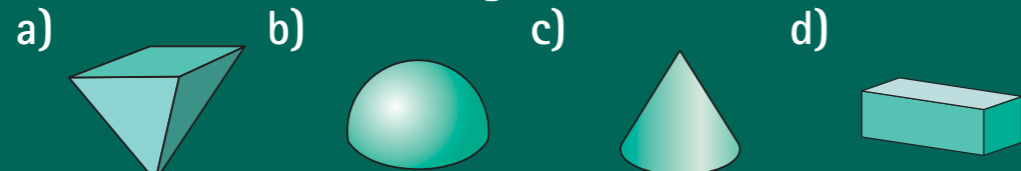
For Level 3, you need to recognise prisms and pyramids. You also need to describe the faces, edges and vertices on solid shapes.



Let's practise!



Question: Circle the prism and fill in the boxes for the number of faces, edges and vertices it has.



Number of faces	Number of edges	Number of vertices

- 1 Read the question, then read it again. Find and describe the prism.
- 2 What information do you need? You need to know a prism has the same shape at each end and that they are joined by rectangles.
- 3 Which shape do you need? Shape d) has a square at each end joined by rectangles.
- 4 Have you finished the question? No, I need to count the number of faces, edges and vertices.
- 5 Count the faces and the edges. There are six flat surfaces, so there are six faces. There are 12 edges.
- 6 Count the vertices. There are eight corners, so that's eight vertices.
- 7 Check your answer. Work through the question again.

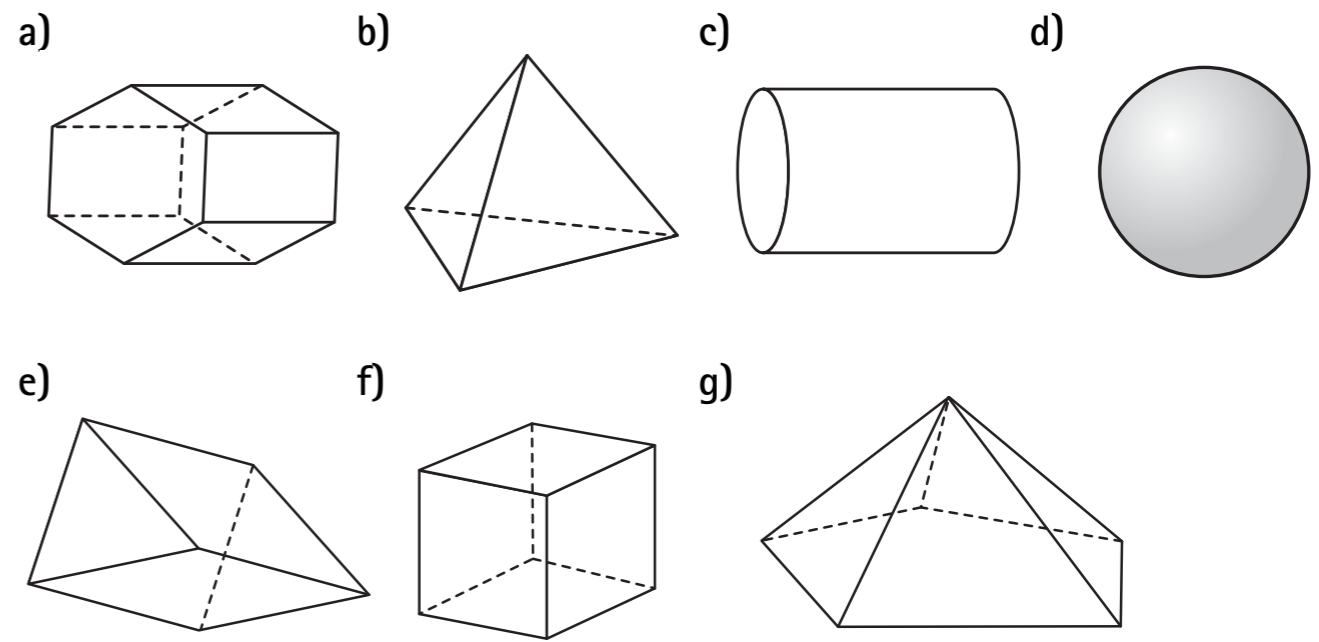
KEY FACTS ★ A vertex is a corner on a 3D shape or a point. The plural of vertex is vertices.



Practice questions



1 Colour the pyramids red and the prisms blue. Colour all the other shapes yellow.



- 2 A cube has faces, edges and vertices.
- 3 A square-based pyramid has faces, edges and vertices.
- 4 A pentagonal prism has faces, edges and vertices.
- 5 The shape with no vertices, one face and no edges is a .
- 6 The shape with one vertex, one edge and two faces is a .