

Division decisions


Understand division and interpret quotients in context

C




1. Use a calculator to do the divisions. Round the answer shown on the calculator to give a sensible answer. Think carefully about whether to round up or down for each situation.


(a) A machine puts matches into matchboxes. Each box holds 175 matches. How many boxes can be filled with 5937 matches?
 Calculator: 33.925714
 Sensible answer: 33




(b) Mrs Owen earns £148 per week. In how many weeks will she earn enough to buy a car costing £4200?
 Calculator: _____
 Sensible answer: _____




(c) Dinesh buys four CDs that cost £47.93 in total. What is the average price of each CD?
 Calculator: _____
 Sensible answer: _____




(d) Li earns £11 an evening for babysitting. About how many evenings must she babysit to earn enough to buy a pair of trainers costing £89?
 Calculator: _____
 Sensible answer: _____



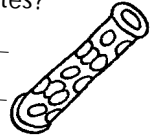
(e) The total cost of Sam's phone calls is £42.90. He made 36 calls. What is the average cost of each call?
 Calculator: _____
 Sensible answer: _____



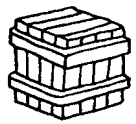
(f) A soap opera lasts for 23 minutes. How many episodes can be recorded back-to-back on a four-hour tape?
 Calculator: _____
 Sensible answer: _____



(g) A machine takes 45 seconds to fill and seal a tube of sweets. How many tubes can it fill and seal in 13 minutes?
 Calculator: _____
 Sensible answer: _____



(h) A lorry carries four identical crates weighing a total of 328.75 kg. About how many grams does each crate weigh?
 Calculator: _____
 Sensible answer: _____



2. Discuss your decisions with a partner.

NOW TRY THIS!

• Write whether these statements are true or false. Give three examples for each.

(a) Dividing zero by a number always gives the answer zero.



(b) Dividing a number by zero always gives the answer zero.



(c) Dividing a number by one always gives the number itself.



(d) Dividing by a positive number always gives a smaller answer.

(e) Dividing by a fraction less than one always gives a larger answer.



In part C, think carefully about the situation in each question. Sometimes a number like 5.78 is rounded **down** where 5 is a more sensible answer than 5.8 or 6 (for example, how many people can fit into a car).