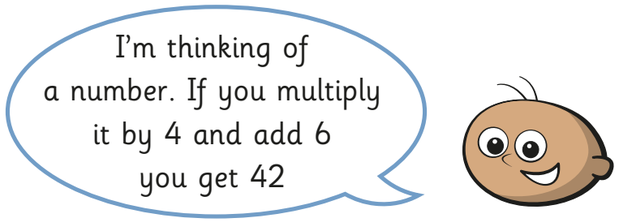
Form and solve equations with brackets

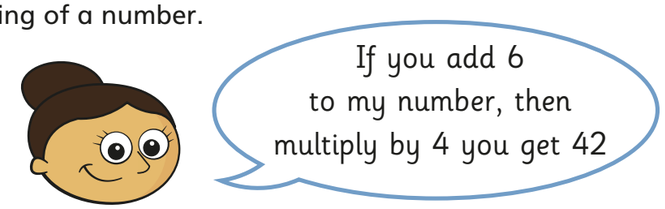
1



a) Form an equation to describe Tommy's number.

b) Solve the equation to find Tommy's number.

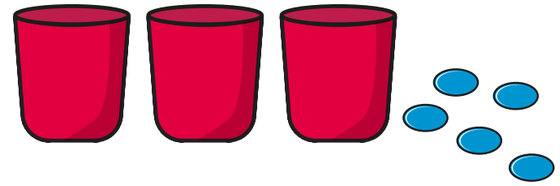
Dora is also thinking of a number.



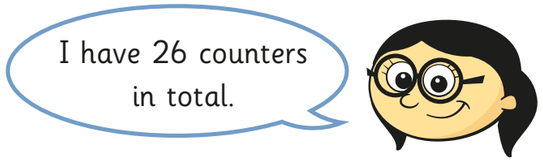
c) Form and solve an equation to find Dora's number.

2

a) Annie has 3 cups of counters and 5 extra counters.

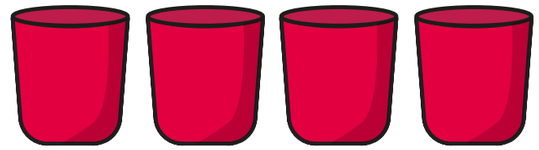


Each cup contains the same number of counters.



Form and solve an equation to work out how many counters Annie has in each cup.

b) Annie now has 4 cups each containing k counters.



She removes 3 counters from each cup.

There are 24 counters in total remaining.

Form and solve an equation to find the value of k.

3 A jug contains 1 litre of juice.

Dani pours a drink for each of her friends.

After Dani has poured out 4 glasses, the jug is half full.

Form an equation and solve it to find the capacity of each glass.

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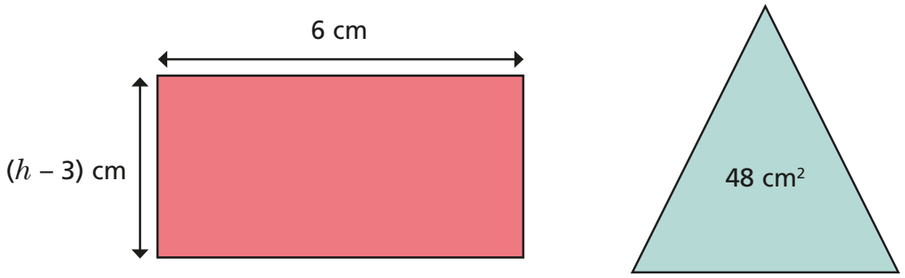
4 The rectangle has the same area as the triangle.



a) Form an equation and find the value of h.

$h =$ ☐

b) Work out the perimeter of the rectangle.

☐

5 Large chocolate bars are 20p more expensive than small chocolate bars.

a) Dexter buys 3 small and 3 large chocolate bars for a total cost of £5.40

Form and solve an equation to find the cost of each bar.

small bar = ☐ large bar = ☐

b) How many different ways can Dexter spend exactly £5 on chocolate bars? Explain your answer.

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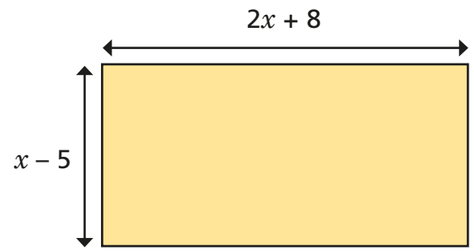
6 The perimeter of this rectangle is 51 cm.



Work out the area of the rectangle.

area = ☐