Algebra - Extension

1. Write an expression for the perimeter of each of the following shapes.

y cm
5 cm
x + y + 5
x cm

z cm
4z
z cm

7 cm
x cm
2x + 14
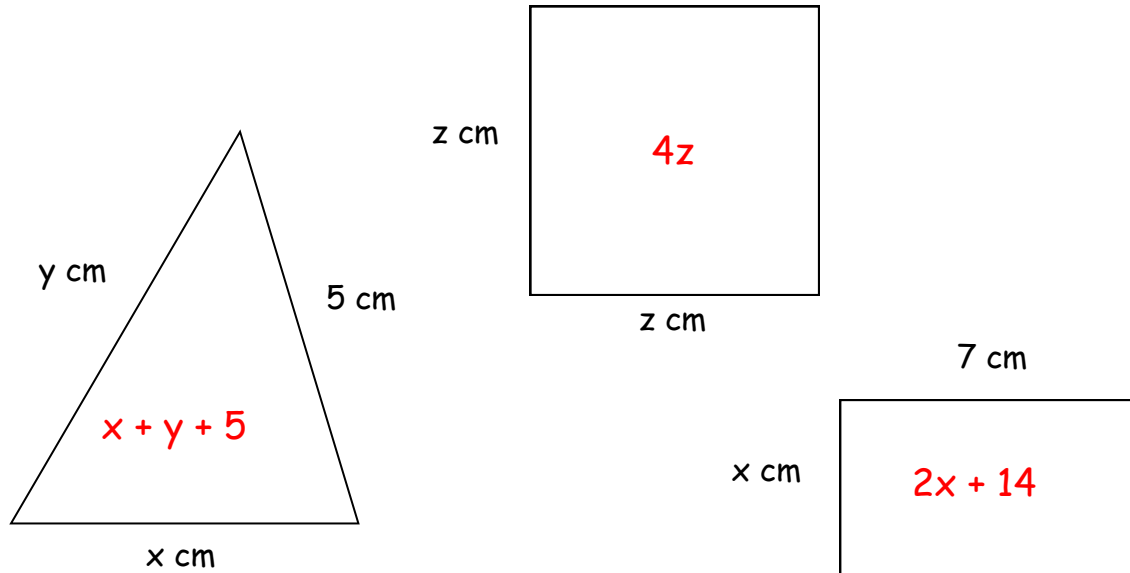
2. Sam asks her friend to think of a number, multiply it by 2 and then add 5. If her friend starts with x, write down an expression for the number she ends up with.

$$2x + 5$$

3. A removal firm makes a fixed charge of £50, plus £2 for every mile travelled. Write down the formula for the cost (C) of a removal when travelling x miles.

$$C = 50 + 2x$$

4. An apple costs 10p. A banana costs 15p. Write down a formula for the cost (C) of x apples and y bananas.

$$C = 10x + 15y$$

5. A taxi driver charges passengers £1, plus 50p per mile. Write down a formula for the cost (C) of travelling x miles.

$$C = 1 + 0.5x$$