

Year 6 Algebra Homework

Q1. $x + 2y = 20$

x and y are whole numbers **less than 10**

What could x and y be?

Q2. What is the value of $4x + 7$ when $x = 5$?

Q3. $2x + y = 20$

when $x = 6$ what is the value of y ?

when $y = 2$ what is the value of x ?

Q4. In this equation **N** stands for a number:

$$5N - 2 = 3N + 12$$

What is the value of **N**?

Q5. Find the value of **t** in this equation: $4 + t = 9t$

Q6. **n** stands for a number: $n + 7 = 13$

What is the value of $n + 10$?

Q7. Find the value of **x** in this equation: $6x - 27 = 0$

Q8. Fill in the **empty boxes** to complete the pattern.

$n + 6$		$7n + 6$
	$4n + 3$	$7n + 3$
n	$4n$	

Extension questions:

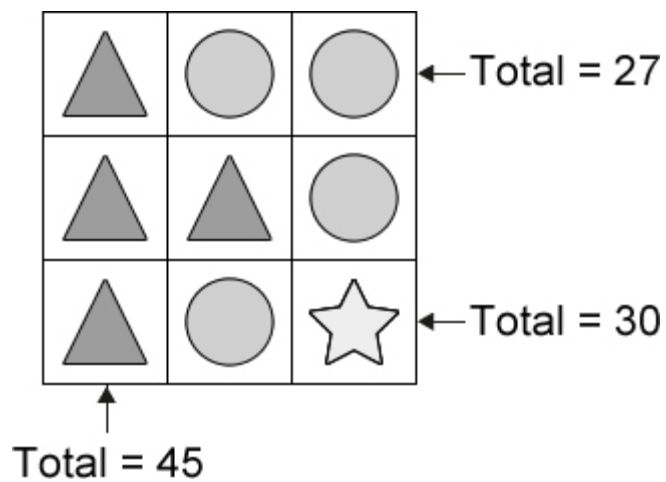
Q9. What is the value of **t** in this equation?

$$3t = t + 3$$

Q10. Find the value of **y** in the equation.

$$8 + y = 7 + 5y$$

Q11. Each shape stands for a number.



Work out the **value** of each shape.

Q12.

A theme park sells tickets online.

Each ticket costs £24

There is a £3 charge for buying tickets.

Which of these shows how to calculate the total cost, in pounds?

number of tickets \times 3 + 24

number of tickets \times 24 + 3

number of tickets + 3 \times 24

number of tickets + 24 \times 3