GCSE HIGHER · REVISION MAT 5

Solving linear equations

1 Solve

$$\frac{x-4}{2} = 6$$

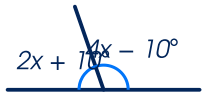
2 Solve

$$8 - 3x = 2x + 23$$

3 Explain why this equation has no solution.

$$2(x + 3) = 2x + 5$$

4 Find the size of each angle.



5 Solve

$$0.4(x + 5) = 0.3x + 3$$

6 Grace has 3 times as many stickers as Hal.

She gives Hal 12 stickers.

Now they have the same number.

How many stickers do they have altogether?

7 Solve

$$\frac{x+3}{4} - \frac{2x-1}{3} = \frac{1}{6}$$

8 Solve

$$(x + 3)^2 = (x - 5)^2$$

Mr&Mrs MATHS

ANSWERS · REVISION MAT 5

Solving linear equations

1 $x - 4 = 12$

$x = 16$

2 $-15 = 5x$

$x = -3$

3 $2x + 6 = 2x + 5$

This gives 6 = 5, which is impossible.

4 $6x = 180$

$x = 30$

110° and 70°

5 $0.4x + 2 = 0.3x + 3$

$0.1x = 1$

$x = 10$

6 $3h - 12 = h + 12$

$h = 12$, Grace 36

48 stickers

7 $3(x + 3) - 4(2x - 1) = 2$

$-5x + 13 = 2$

$x = 2.2$

8 $x^2 + 6x + 9 = x^2 - 10x + 25$

$16x = 16$

$x = 1$