GCSE FOUNDATION · REVISION MAT 1

Solving linear equations

1 Solve

(a) $5x - 3 = 27$

(b) $\frac{x}{4} + 2 = 9$

2 Solve

$3(2x + 1) = 39$

3 Tom solves $4x + 7 = 31$

Tom writes:

$4x = 38$

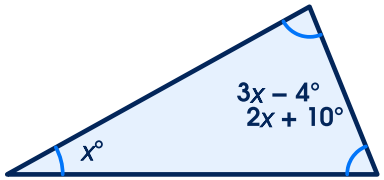
$x = 9.5$

Explain the mistake Tom has made.

4 Show that $x = 3$ is the solution of

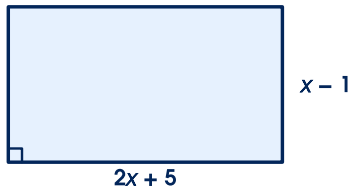
$5x - 4 = 2x + 5$

5 The angles of this triangle are in degrees.



Work out the size of the largest angle.

6 The perimeter of this rectangle is 44 cm.



Work out the area of the rectangle.

ANSWERS · REVISION MAT 1

Solving linear equations

1 (a) $5x = 30$, $\boldsymbol{x = 6}$

(b) $\frac{x}{4} = 7$, $\boldsymbol{x = 28}$

2 $2x + 1 = 13$

$2x = 12$

$\boldsymbol{x = 6}$

3 Tom did the wrong inverse: to remove +7 you must subtract 7.

$4x = 24$, so $\boldsymbol{x = 6}$

4 Left: $5 \times 3 - 4 = 11$

Right: $2 \times 3 + 5 = 11$

Both sides equal 11 ✓

5 $6x + 6 = 180$

$x = 29$

Angles: 29°, 68°, 83°

Largest = **83°**

6 $2(2x + 5) + 2(x - 1) = 44$

$6x + 8 = 44$, so $x = 6$

$17 \times 5 = \boldsymbol{85\ cm^2}$