GCSE FOUNDATION · REVISION MAT 2

Solving linear equations

1 Solve

(a) $3x + 8 = 41$

(b) $\frac{x}{5} - 1 = 6$

2 Solve

$4(3x - 2) = 52$

3 Una solves $3x - 5 = 16$

Una writes:

$3x = 11$

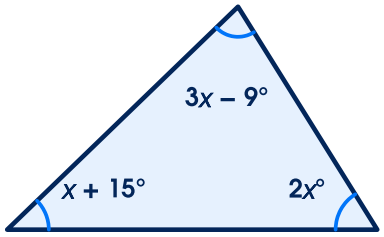
$x = 3\frac{2}{3}$

Explain the mistake Una has made.

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

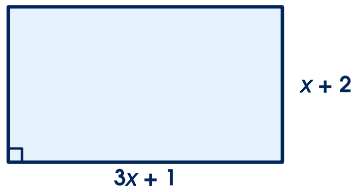
$7x + 2 = 3x + 18$

5 The angles of this triangle are in degrees.



Work out the size of the largest angle.

6 The perimeter of this rectangle is 46 cm.



Work out the area of the rectangle.

1 (a) $3x = 33$, $\boldsymbol{x = 11}$

(b) $\frac{x}{5} = 7$, $\boldsymbol{x = 35}$

2 $3x - 2 = 13$

$3x = 15$

$\boldsymbol{x = 5}$

3 Una did the wrong inverse: to remove −5 you must add 5.

$3x = 21$, so $\boldsymbol{x = 7}$

ANSWERS · REVISION MAT 2

Solving linear equations

4 Left: $7 \times 4 + 2 = 30$
Right: $3 \times 4 + 18 = 30$

Both sides equal 30 ✓

5 $6x + 6 = 180$

$x = 29$

Angles: 44°, 58°, 78°

Largest = **78°**

6 $2(3x + 1) + 2(x + 2) = 46$

$8x + 6 = 46$, so $x = 5$

$16 \times 7 =$ **112 cm²**