GCSE FOUNDATION · REVISION MAT 3

Solving linear equations

1 Solve

(a) $7x - 4 = 45$

(b) $\frac{x}{3} + 6 = 10$

2 Solve

$5(2x + 3) = 65$

3 Vik solves $5x + 9 = 44$

Vik writes:

$5x = 53$

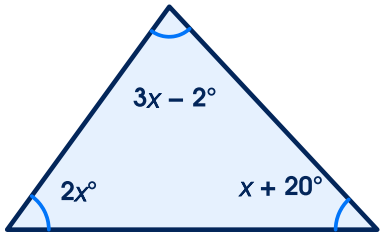
$x = 10.6$

Explain the mistake Vik has made.

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

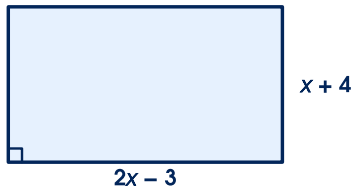
$6x - 5 = 4x + 3$

5 The angles of this triangle are in degrees.



Work out the size of the largest angle.

6 The perimeter of this rectangle is 52 cm.



Work out the area of the rectangle.

1 (a) $7x = 49$, $\boldsymbol{x = 7}$

(b) $\frac{x}{3} = 4$, $\boldsymbol{x = 12}$

2 $2x + 3 = 13$

$2x = 10$

$\boldsymbol{x = 5}$

3 Vik did the wrong inverse: to remove +9 you must subtract 9.

$5x = 35$, so $\boldsymbol{x = 7}$

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Solving linear equations

4 Left: $6 \times 4 - 5 = 19$
Right: $4 \times 4 + 3 = 19$

Both sides equal 19 ✓

5 $6x + 18 = 180$

$x = 27$

Angles: 54°, 47°, 79°

Largest = **79°**

6 $2(2x - 3) + 2(x + 4) = 52$

$6x + 2 = 52$, so $x = 8\frac{1}{3}$

$13\frac{2}{3} \times 12\frac{1}{3} = \boldsymbol{168\frac{5}{9}\ \text{cm}^2}$

Mr&Mrs MATHS