Algebra 1 Bellwork Thursday, October 22, 2015

Find the exact solution to each equation.

1. $5 + 6p - 19 = 3p$

2. $4 - 3(m + 2) + 7m = -3 + 8 + 4m - 2$

3. $9k + 2 - 3k - 14 = 3(2k - 5) + 3$

4. The perimeter of a rectangle is 46 cm. The length is one less than twice the width. Write and solve an equation to find the dimensions (length and width) of the rectangle.

Algebra 1 Bellwork Thursday, October 22, 2015 Answers

Find the exact solution to each equation.

1. $5 + 6p - 19 = 3p$

$6p - 14 = 3p$

$-6p \quad -6p$

$-14 = -3p$

$\frac{-14}{-3} = \frac{-3p}{-3}$

$p = \frac{14}{3}$

2. $4 - 3(m + 2) + 7m = -3 + 8 + 4m - 2$

$4 - 3m - 6 + 7m = -3 + 8 + 4m - 2$

$-2 + 4m = 4m + 3$

$-4m \quad -4m$

$-2 = 3$ FALSE!

NO SOLUTION

3. $9k + 2 - 3k - 14 = 3(2k - 5) + 3$

$6k - 12 = 6k - 15 + 3$

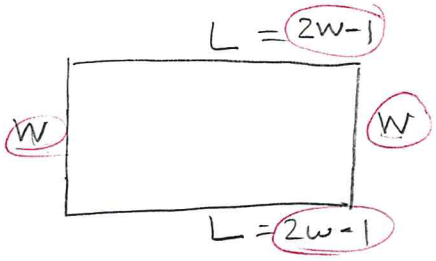
$6k - 12 = 6k - 12$

$-6k \quad -6k$

$-12 = -12$ TRUE

ALL REAL #'s

4. The perimeter of a rectangle is 46 cm. The length is one less than twice the width. Write and solve an equation to find the dimensions (length and width) of the rectangle.



$P = L + W + L + W$

$46 = 2w - 1 + w + 2w - 1 + w$

$46 = 6w - 2$

$+2 \quad +2$

$48 = 6w$

$w = 8$

$L = 2(8) - 1$

$L = 16 - 1$

$W = 8$

$L = 15$