10/10 = 100

Key

Support for College Algebra
Spring 2017
Quiz #1

SHOW ALL WORK QUIZ!

Solve the following two equations.

1. $3[2-5(x+1)] = -4(2x+1)$

$3[2-5x-5] = -8x-4$

$3[-3-5x] = -8x-4$

$-9-15x = -8x-4$

$-5 = 7x$

$\boxed{-\frac{5}{7} = x}$

Check (worth 1 point)

$3\left[2-5\left(-\frac{5}{7}+1\right)\right] = -4\left(2\left(-\frac{5}{7}\right)+1\right)$

$3\left[2-5\left(\frac{-5+7}{7}\right)\right] = -4\left(-\frac{10}{7}+1\right)$

$3\left[2-5\left(\frac{2}{7}\right)\right] = -4\left(\frac{-10+7}{7}\right)$

$= -4\left(-\frac{3}{7}\right)$

$3\left[2-\frac{10}{7}\right] = \frac{12}{7}$

$3\left[\frac{14-10}{7}\right] = \frac{12}{7}$

$3\left[\frac{4}{7}\right] = \frac{12}{7}$

$\frac{12}{7} = \frac{12}{7}$ ✓

2. $\frac{x+2}{12} = \frac{5}{4}$ LCD: 12

$12\left(\frac{x+2}{12} = \frac{5}{4}\right)$

$x+2 = 15$

$x = 13$

$\frac{13+2}{12} = \frac{5}{4}$

$\frac{15}{12} = \frac{5}{4}$

$\frac{5}{4} = \frac{5}{4}$ ✓