October 28, 2015

Exam #2 70/30

Operations on polynomials

Use of Laws of Exponents

Factoring

Simplifying Fractions

Solving "Symbol" equations and stating "Goals"

Functions & Relations

Evaluating equations by substituting a value for a variable

Oct 28-8:58 AM

$x = \frac{16}{5}$

$7(x-2)+4 = 2(x+3)$

$7\left(\frac{16}{5} - \frac{2}{1}\right)+4 = 2\left(\frac{16}{5} + \frac{3}{1}\right)$

$7\left(\frac{16-10}{5}\right)+4 = 2\left(\frac{16+15}{5}\right)$

$7\left(\frac{6}{5}\right)+4 = 2\left(\frac{31}{5}\right)$

$\frac{42}{5} + \frac{4}{1} = \frac{62}{5}$

$\frac{42+20}{5}$

$\frac{62}{5} = \frac{62}{5}$ ✓

Oct 28-9:31 AM

Factoring $a > 1$

#2) $2n^2 + 3n - 9$ $ac = -18$, $b = 3$

+	−
6	3

$2n^2 + 6n - 3n - 9$

$2n(n+3) - 3(n+3)$

$(n+3)(2n-3)$

Oct 28-9:11 AM

#16) $-6a^2 - 25a - 25$

$-(6a^2 + 25a + 25)$ $ac = 150$, $b = 25$

+	+
15	10

$-(6a^2 + 15a + 10a + 25)$

$-(3a(2a+5) + 5(2a+5))$

$-(2a+5)(3a+5)$ fully factored

$(-2a-5)(3a+5)$

$-6a^2 - 10a - 15a - 25$

$-6a^2 - 25a - 25$ ✓

Oct 28-9:16 AM

#9) $15n^2 - 27n - 6$

$3(5n^2 - 9n - 2)$ $ac = -10$, $b = -9$

−	+
10	1

$3(5n^2 - 10n + n - 2)$

$3(5n(n-2) + 1(n-2))$

$3(n-2)(5n+1)$

need to be F. P.

Oct 28-9:36 AM

#17) $6n^2 + 5n - 6$ (opp signs) $ac = -36$, $b = 5$

+	−
9	4

$6n^2 + 9n - 4n - 6$

$3n(2n+3) - 2(2n+3)$

$(2n+3)(3n-2)$

Oct 28-9:40 AM

$(-8x^{-6}y^{4}z^{-6})(4x^{-3}y^{8}z^{6})$

$-32x^{-9}y^{12}z^{0}$

$-\frac{32y^{12}}{x^{9}}$

Oct 28-9:45 AM