

November 15, 2017

$$a^2 \quad 16b^2 \quad -40b \quad +25 \quad ac=(14)(25) = 400$$

$$a' = 4b \quad b' = -5$$

$$16b^2 - 20b - 20b + 25$$

$$4b(4b-5) - 5(4b-5) \quad \frac{20}{20} \quad \frac{20}{20}$$

$$(4b-5)(4b-5)$$

$$(4b-5)^2$$

Nov 15-8:07 AM

$$(a \pm b)^2 = (a \pm b)(a \pm b)$$

$$a' = + = a^2 + 2ab + b^2$$

$$b' = - = a^2 - 2ab + b^2$$

$$16b^2 - 40b + 25 = (4b-5)^2$$

$$a' = 4b \quad b' = -5$$

Nov 15-9:10 AM

6.5 #10

$$9u^2 + 24uv + 16v^2$$

$$ac = 9 \cdot 16 = 144$$

$$9u^2 + 12uv + 12uv + 16v^2 \quad b = 24$$

$$3u(3u+4v) + 4v(3u+4v) \quad \frac{+}{12} \quad \frac{+}{12}$$

$$(3u+4v)(3u+4v)$$

$$(3u+4v)^2$$

Nov 15-9:16 AM

$$4x^2 - 4x + 1$$

$$ac = 4$$

$$b = -4$$

$$\frac{-}{2} \quad \frac{-}{2}$$

Nov 15-9:21 AM

$$10p^3 - 1960p$$

Diff of Squares

$$10p(p^2 - 196)$$

$$a' = p \quad b' = 14$$

$$14^2 = 196$$

$$10p(p+14)(p-14)$$

Nov 15-9:23 AM

7.3 Simplify Rational Expressions

i.e. Fractions

#5) $-\frac{70n^2}{28n}$

$$-\frac{7 \cdot 10 \cdot n \cdot n}{7 \cdot 4 \cdot n}$$

$-\frac{10n}{4}$ Not R.P.!

$$-\frac{2 \cdot 5 \cdot n}{2 \cdot 2}$$

$$-\frac{5n}{2}$$

Nov 15-9:26 AM

#10) $\frac{15a-3}{24}$ *sum!*

$\frac{3(5a-1)}{24}$ *now written as a product*

now simplify

$\frac{5a-1}{8}$

Nov 15-9:32 AM

#22) $\frac{x^3-x^2-42x}{2x^2-20x+42}$ *factor*

$\frac{x(x^2-x-42)}{2(x^2-10x+21)}$ *factor*

$\frac{x(x-7)(x+6)}{2(x-7)(x-3)}$

A.P. $\left\{ \frac{x(x+6)}{2(x-3)} \text{ or } \frac{x^2+6x}{2x-6} \right.$

Nov 15-9:40 AM