

November 15, 2017

6.5
#21) $5s^3t - 20s^2t^2 + 20st^3$
 $GC F = 5st$

$5st (s^2 - 4st + 4t^2)$ $ac = 4$
 $bc = -4$

$5st (s^2 - 2st - 2st + 4t^2)$

$5st [s(s-2t) - 2t(s-2t)]$

$5st (s-2t)(s-2t)$
 $5st (s-2t)^2$

Nov 15-9:48 AM

HO
#3) $16b^2 - 40b + 25$

a^2 b^2
 $a' = 4b$ $b' = 5$

$16b^2 - 20b - 20b + 25$ $ac = 16 \cdot 25 = 400$
 $4b(4b-5) - 5(4b-5)$ $bc = -40$

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

Nov 15-10:16 AM

Perfect Square Trinomial

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

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

Nov 15-10:18 AM

HO
#7) $m^4 - 100$ } Quadratic "like" x^2

$(m^2)^2 - 100$
 $a' = m^2$ $b' = 10$

$(m^2 + 10)(m^2 - 10)$
 $m^4 - 100 \checkmark$

Nov 15-10:25 AM

HO
#22) $200m^4 + 80m^3 + 8m^2$
 $GC F = 8m^2$

$8m^2 (25m^2 + 10m + 1)$ $ac = 25$
 $bc = 10$

$8m^2 [25m^2 + 5m + 5m + 1]$ $\frac{+}{5} \frac{+}{5}$

$8m^2 [5m(5m+1) + 1(5m+1)]$

$8m^2 (5m+1)(5m+1)$
 $8m^2 (5m+1)^2$

Nov 15-10:29 AM

Chapter 7 Rational Functions

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 Fractions ☺

$f(x) = \frac{p(x)}{q(x)}$ where $q(x) \neq 0$

7.3 Simplify Rational Expression

#5) $-\frac{70m^2}{28m} = -\frac{7 \cdot 10 \cdot m \cdot m}{7 \cdot 4 \cdot m}$

$= -\frac{10m}{4}$ not R.F.!

$= -\frac{5 \cdot m}{2}$
 $= -\frac{5m}{2}$

Nov 15-10:33 AM