Pg. 636: 21-35 (a)

21. $\frac{5}{2}$

22. $\frac{4}{3}$

23. $\frac{1}{3}$

24. -6, 6

25. -8, 8

26. 27

27. 10

28. -10

29. $-\frac{5}{3}$

30. $\frac{5}{3}$

31. -5, 2

32. -6, 9

33. 2, 5

34. 6

35. 4, $\frac{5}{2}$

31

$$\frac{x}{2} = \frac{5}{(x+3)}$$

$$x(x+3) = 2 \cdot 5$$

$$x^2 + 3x = 10$$

$$-10 \quad -10$$

$$x^2 + 3x - 10 = 0$$

$1 \cdot 10$
$2 \cdot 5$

$$(x-2)(x+5) = 0$$

11.3 Simplifying Rational Expressions

May 10, 2007

$$\frac{a \cdot c}{b \cdot c} = \frac{a}{b} \cdot \frac{c}{c} = \frac{a}{b}$$

ex 1) $\frac{14x}{7} = 2x$

ex 2) $\frac{26x}{9x^4} = \frac{2}{3x}$

ex3| $\frac{2x}{2(x+5)} = \frac{x}{(x+5)}$

( ) are thought of as their own Variable!!

Plus & Minus act as a Marriage Between two terms

ex4| $\frac{(x+4)}{x}$

Already Simplified

ex5

GCF → $2x$

$$\frac{2x^2-6x}{6x^2} = \frac{2x(x-3)}{3(2)x^2}$$

$$= \frac{(x-3)}{3x}$$

First, Before we can Simplify... we must First Make Sure the top & Bottom are Factored Completely

ex6

$$\frac{4m^3}{2m^3+8m^2} = \frac{2(2)m^3}{2m^2(m+4)}$$

$$= \frac{2m}{(m+4)}$$

ex7 $\dfrac{(x^2-2x-3)^{1.3}}{(x-3)} = \dfrac{(x+1)(x-3)}{(x-3)}$

$= (x+1)$

ex8 $\dfrac{(4-x^2)^{1.2}}{(x^2-x-2)} \overset{p^s - p^s}{=} \dfrac{(2+x)(2-x)}{(x+1)(x-2)}$

New Thought
Switch & Pull
Switch
$(2-x) = (-x+2)$
Pull... a -1 just like we would with a G.C.F.
$(-x+2) = -1(x-2)$

$= \dfrac{-1(2+x)(x-2)}{(x+1)(x-2)}$

$= \dfrac{-1(2+x)}{(x+1)}$

O.T.L.

Pg: 649: 16-46 **(E)**

* Will be collected & graded for Correctness!