Review

May 16, 2007

Proportions:

$\frac{x}{10} = \frac{4}{5}$

$x \cdot 5 = 10 \cdot 4$

$\frac{5x}{5} = \frac{40}{5}$

$x = 8$

$\frac{(6x+4)}{5} = \frac{2}{x}$

$(6x+4) \cdot x = 5 \cdot 2$

$6x^2 + 4x = 10$

$-10 \quad -10$

$6x^2 + 4x - 10 = 0$

$2(3x^2 + 2x - 5) = 0$

$2(1x-1)(3x+5) = 0$

$2 = 0$ or $x - 1 = 0$ or $3x + 5 = 0$

$+1 \quad +1$

$-5 \quad -5$

$\frac{3x}{3} = \frac{-5}{3}$

$x = 1$ or $x = -\frac{5}{3}$

Simplify

$$\frac{3\cancel{15}x^{\cancel{2}}}{2\cancel{10}\cancel{x}} = \frac{3x}{2}$$

Simplify

Make Sure You Factor Completly

$$\frac{x^2-7x+12}{x^2+3x-18} = \frac{(x-3)(x-4)}{(x-3)(x+6)} = \frac{(x-4)}{(x+6)}$$

1·12
2·6
3·4

1·18
2·9
3·6

$$\frac{3-x}{x^2+x-12} = \frac{-1(x-3)}{(x-3)(x+4)} = \frac{-1}{(x+4)}$$

$(-x+3)$

$(3-x)$

$1 \cdot 12$
$2 \cdot 6$
$3 \cdot 4$

$$\frac{5x}{11x+x^2} = \frac{5x}{x(11+x)} = \frac{5}{(11+x)}$$

$$(x^2 - 3x - 28) \div (x - 7)$$

$$\frac{(x+4)(x-7)}{1} \cdot \frac{1}{(x-7)} = \frac{(x+4)}{}$$

$1 \cdot 28$
$2 \cdot 14$
$4 \cdot 7$

$$(6x^2+11x+3) \div (3x+1)$$

$$\frac{(3x+1)(2x+3)}{(6x^2+11x+3)} \cdot \frac{1}{(3x+1)} = \frac{(2x+3)}{1}.$$

$$\frac{2x-4}{x^2+3x} - \frac{x-7}{x^2+3x} = \frac{(2x-4)-(x-7)}{(x^2+3x)} = \frac{2x-4-x+7}{x(x+3)} = \frac{1}{x}$$

Subt. & Simp.

Adding & Simp.

Mult. & Simp.

Divi & Simp.

Test Tomorrow

Pro. (cross multiply)

Means = extreams

Has an equal sign