

November 10, 2015

$$\frac{3x+3}{5x-5x^2} \cdot \frac{2x^2+x-3}{4x^2-9}$$

① Factor everything
 ② Divide out common factors
 using of LCD

$$\frac{3(x+1)}{5x(1-x)} \cdot \frac{(2x+3)(x-1)}{(2x+3)(x-3)}$$

$$\frac{3(x+1)}{5x(1-x)} \cdot \frac{(x-1)}{(x-3)}$$

$$\frac{(x-1)}{(1-x)} = \frac{(x-1)}{-(x-1)}$$

$\frac{(1-x)}{-(1+x)}$
 Common
 Cancel out
 $\frac{1}{-1} = -1$

$$\frac{3(x+1)}{(5x)(-1)(x-3)} \cdot \frac{(x-1)}{2x-3}$$

$$\frac{3(x+1)}{-5x} \cdot \frac{1}{2x-3}$$

$$\frac{3(x+1)}{-5x(2x-3)}$$

or

$$-\frac{3x+3}{10x^2-15x}$$

Nov 10-9:07 AM

$$2x^2 + 3x - 3$$

$ac = -6$
 $b = 1$

+	-
3	2

$$2x^2 + 3x - 2x - 3$$

$$x(2x+3) - 1(2x+3)$$

$$(2x+3)(x-1)$$

Nov 10-9:16 AM

$$-\frac{36x}{42x^2} = -\frac{2 \cdot 2 \cdot 3 \cdot 3 \cdot \cancel{x} \cdot \cancel{x} \cdot x}{2 \cdot 3 \cdot 7 \cdot \cancel{x} \cdot \cancel{x}}$$

$$-\frac{6x}{7} = -\frac{2 \cdot 3 \cdot x}{7}$$

$$-\frac{6x}{7} = -\frac{6x}{7}$$

Nov 10-9:41 AM

$$\frac{45}{10a-10} = \frac{5 \cdot 3 \cdot 3}{10(a-1)}$$

$$\frac{45}{2 \cdot 5(a-1)} = \frac{5 \cdot 3 \cdot 3}{2 \cdot 5(a-1)}$$

$$\frac{9}{2(a-1)} = \frac{9}{2(a-1)}$$

Nov 10-9:46 AM

$$81v^4 - 900v^2$$

$$9v^2(9v^2 - 100)$$

Diff of two squares

$$9v^2(3v+10)(3v-10)$$

Nov 10-9:49 AM