

December 5, 2016

Exam #3

* avg 84! 😊

Probs

$$\frac{13}{54vw^2} + \frac{19}{27v^2w}$$

$$\frac{13(4v) + 19(9w)}{216v^2w^2}$$

$$\frac{52v + 171w}{216v^2w^2}$$

Dec 5-9:52 AM

#13) $\frac{b^4}{c^4} \div \frac{9b^2}{c^2}$

\downarrow \downarrow \downarrow

$\frac{b^{4-2}}{c^{4-2}} = \frac{b^2}{9c^2}$

Dec 5-10:10 AM

#3)

$$2x^3 + 7x^2 - 3x + 4$$

Dec 5-10:12 AM

* Final Exam

* Monday, December 12th

@ 10:20 in 320

* Covers everything

Dec 5-10:14 AM

7.4 Solve Rational Equations

$$\frac{1}{2}x + \frac{1}{3} = \frac{1}{4}; \text{ solve for } x$$

* Goal: $x = \text{stuff}$

① Find & Distribute the LCD through the equation to clear the fractions.

$$12 \left(\frac{1}{2}x + \frac{1}{3} = \frac{1}{4} \right)$$

$$\frac{12}{1} \cdot \frac{1}{2}x + \frac{12}{1} \cdot \frac{1}{3} = \frac{12}{1} \cdot \frac{1}{4}$$

$$6x + 4 = 3$$

$$6x = -1$$

$$x = -\frac{1}{6}$$

ok

$$\frac{1}{2} \left(-\frac{1}{6} \right) + \frac{1}{3} = \frac{1}{4}$$

$$-\frac{1}{12} + \frac{1}{3} = \frac{1}{4}$$

$$\frac{-1 + 4}{12} = \frac{1}{4}$$

$$\frac{3}{12} = \frac{1}{4}$$

$$\frac{1}{4} = \frac{1}{4} \checkmark$$

Dec 5-10:20 AM

$$x^2 \left(1 - \frac{2}{x} = \frac{3}{x^2} \right) \text{ LCD: } x^2$$

$$x^2 \cdot 1 - x^2 \cdot \frac{2}{x} = x^2 \cdot \frac{3}{x^2}$$

$$x^2 - 2x = 3$$

$$x^2 - 2x - 3 = 0 \text{ now factor}$$

$$x^2 - 3x + x - 3 = 0 \text{ ac} = -3 \text{ b} = -2$$

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

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

① $x = 3$

② $x = -1$

ok $x = 3$

$$1 - \frac{2}{3} = \frac{3}{(3)^2}$$

$$1 - \frac{2}{3} = \frac{3}{9}$$

$$1 - \frac{2}{3} = \frac{1}{3}$$

$$\frac{3-2}{3} = \frac{1}{3}$$

$$\frac{1}{3} = \frac{1}{3} \checkmark$$

Dec 5-10:28 AM

$$x^2 \left(6 - \frac{22}{x^2} = \frac{29}{x} \right) \quad \text{LCD: } x^2$$

$$6x^2 - 22 = 29x$$

$$6x^2 - 29x - 22 = 0$$

$$6x^2 - 33x + 4x - 22 = 0 \quad \begin{array}{l} ac = 6(-22) = -132 \\ b = -29 \end{array}$$

$$3x(2x-11) + 2(2x-11) = 0 \quad \begin{array}{l} - \\ + \\ \hline 3x \quad 4 \end{array}$$

$$(2x-11)(3x+2) = 0$$

① $2x - 11 = 0$
 $2x = 11$
 $x = \frac{11}{2}$

② $3x + 2 = 0$
 $3x = -2$
 $x = -\frac{2}{3}$

Dec 5-10:34 AM

Do 7.4 #1-#24 m3

Dec 5-10:43 AM