

February 15, 2016
 * Exam #1 - February 26

Feb 15-9:01 AM

2.1

#42)
$$\frac{-3.5x}{-3.5} = \frac{22.4}{-3.5}$$

$$x = -6.4$$

#32)
$$x + \frac{1}{2} = -\frac{9}{7}$$

$$x = -\frac{9}{7} - \frac{1}{2}$$

$$= \frac{-18-7}{14}$$

$$x = -\frac{25}{14}$$

ok

$$-\frac{25}{14} + \frac{1}{2} = -\frac{9}{7}$$

$$\frac{-25+7}{14} =$$

$$-\frac{18}{14} = -\frac{9}{7}$$

$$-\frac{9}{7} = -\frac{9}{7}$$

Feb 15-9:05 AM

$$\frac{a}{b} \pm \frac{c}{d} = \frac{ad \pm bc}{bd}$$

①
$$\frac{1}{3} + \frac{2}{5} = \frac{1(5) + 2(3)}{3 \cdot 5 = 15}$$

$$= \frac{5 + 6}{15} = \frac{11}{15}$$

②
$$\frac{1}{3} + \frac{5}{6} = \frac{3(2) + 5}{6}$$

$$= \frac{6 + 5}{6} = \frac{11}{6}$$

Feb 15-9:11 AM

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

$$= \frac{x + 15}{3x} \text{ a "one" ?}$$

Feb 15-9:14 AM

$$\frac{x + 15}{3x} \quad x = 2$$

$$\frac{2 + 15}{3(2)} = \frac{17}{6}$$
~~$$\frac{x + 15}{3x} = \frac{15}{3} = 5$$~~

$$5 \neq \frac{17}{6}$$

Feb 15-9:16 AM

$$\frac{15 \cdot x}{3 \cdot x} \quad x = 2$$

$$\frac{15(2)}{3(2)} = \frac{30}{6} = 5$$

$$\frac{15}{3} = 5$$

$$5 = 5 \checkmark$$

Feb 15-9:20 AM

Complete 2.1

Distributive Tool
x multiplication over Addition

Left Side Right Side

$$a(b+c) = \underbrace{ab}_{\text{Product}} + \underbrace{ac}_{\text{Product}}$$

$$3(x+4) = 3x + 3(4)$$

$$= 3x + 12$$

$$-1(y+6) = (-1)(y) + (-1)(6)$$

$$= -y - 6$$

Feb 15-9:22 AM

$$ax + ay = a(\underbrace{x+y}_{\text{R.P.}})$$

$$-5x - 45 = 5(-x - 9)$$

$$= 5(-1)(x+9)$$

$$= -5(\underbrace{x+9}_{\text{R.P.}})$$

Feb 15-9:30 AM

$$3(x-5) + 2 = 7(x+2) - 3$$

$$3x(-15+2) = -7x(-14-3)$$

$$3x - 13 = -7x - 17$$

Dist.

$$+7x + 13 = +7x + 13$$

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

$$x = -\frac{2}{5}$$

$$3(-\frac{2}{5}-5) + 2 = -7(-\frac{2}{5}+2) - 3$$

$$3(\frac{-2-25}{5}) + 2 = -7(\frac{-2+10}{5}) - 3$$

$$3(-\frac{27}{5}) + 2 = -7(\frac{8}{5}) - 3$$

$$-\frac{81}{5} + \frac{2}{1} = -\frac{56}{5} - \frac{3}{1}$$

$$\frac{-81+10}{5} = \frac{-56-15}{5}$$

$$-\frac{71}{5} = -\frac{71}{5} \checkmark$$

Feb 15-9:34 AM