

Warm-Up

February 13, 2018

$$A. 3x - 4 = 2(-3x + 5)$$

$$3x - 4 = -6x + 10$$

$$3x + 6x - 4 = \boxed{-6x + 6x} + 10$$

$$9x - 4 = 10$$

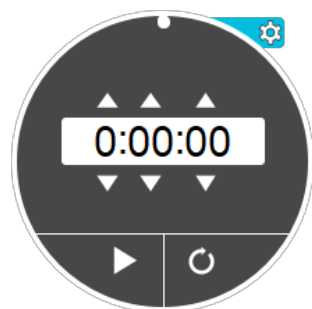
$$9x \boxed{-4 + 4} = 10 + 4$$

$$\frac{9x}{9} = \frac{14}{9}$$

$$x = \frac{14}{9}$$

$$= \frac{15}{9}$$

**15 minutes to practice circled questions on worksheet**



$$\frac{x}{4} - 3 = 2$$

Solving equations with fractions....clear the

fractions!!! Multiply each term by LCM

[lowest common multiple]

$$\overset{(6)}{\frac{1x}{2}} + \overset{(6)}{\frac{1x}{3}} = \overset{(6)}{10}$$

$$\text{LCM: } \underline{6}$$

$$\frac{6x}{2} + \frac{6x}{3} = 60$$

$$3x + 2x = 60$$

$$\frac{5x}{5} = \frac{60}{5}$$

$$x = 12$$

3...-2...6

$$\overset{(12)}{\frac{2x}{3}} + \overset{(12)}{9} = \overset{(12)}{\frac{3x}{4}} - \overset{(12)}{6}$$

LCM: 12  
 3, 6, 9, 12...  
 4, 8, 12...

$$\frac{24x}{3} + 108 = \frac{36x}{4} - 72$$

$$8x + 108 = 9x - 72$$

$$8x - 9x + 108 = \boxed{9x - 9x} - 72$$

$$-1x + 108 = -72$$

$$-1x \boxed{+ 108 - 108} = -72 - 108$$

$$\frac{-1x}{-1} = \frac{-180}{-1}$$

$$x = 180$$



$$\begin{array}{l} -x = 4 \\ x = -4 \end{array}$$

$$\overset{(15)}{\frac{2a}{3}} = \overset{(15)}{\frac{4a}{5}} + 7 \overset{(15)}{\phantom{a}} \quad \text{LCM} = \underline{15}$$

$$\frac{30a}{3} = \frac{60a}{5} + 105$$

$$10a = 12a + 105 \quad \leftarrow$$

$$10a - 12a = \boxed{12a - 12a} + 105$$

$$\frac{-2a}{-2} = \frac{105}{-2} \quad a = -52.5$$

$$\overset{(12)}{\frac{2x}{3}} + \overset{(12)}{\frac{11}{4}} = 3 - \overset{(12)}{\frac{11x}{6}} \quad \text{LCM} = \underline{12}$$

$$\frac{24x}{3} + \frac{132}{4} = 36 - \frac{132x}{6}$$

$$8x + 33 = 36 - 22x$$

$$8x + 22x + 33 = 36 - \boxed{22x + 22x}$$

$$30x + 33 = 36$$

$$30x + \boxed{33 - 33} = 36 - 33$$

$$\frac{30x}{30} = \frac{3}{30}$$

$$x = \frac{3}{30} = \frac{1}{10}$$

$$(5) \frac{2}{5}(m+4) = \frac{(5)1}{5}(3m+9)$$

LCM = 5

$$\frac{10}{5}(m+4) = \frac{5}{5}(3m+9)$$

$$2(m+4) = 3m+9$$

$$2m+8 = 3m+9 \quad \leftarrow$$

$$2m-3m+8 = \boxed{3m-3m}+9$$

$$-1m+8 = 9$$

$$-1m \boxed{+8-8} = 9-8$$

$$\frac{-1m}{-1} = \frac{1}{-1}$$

$m = -1$



Page 282 # 19 [a, c, d]

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Midunit review Page 286  
5, 7 [a, b, c, e, f ], 8

$m=8$

$r = -\frac{1}{39}$

$x = \frac{67}{90}$

a)  $x = -3\frac{2}{3}$

b)  $x = 20$

c)  $x = 4$

d)  $x = 5$

- a)  $K = -4.5$
- b)  $b = 7\frac{2}{3}$
- c)  $x = 10.1$
- d)  $b = 7$
- e)  $n = 2.4$
- f)  $h = -23.2$

- a)  $\alpha = -16$
- b)  $w = 6.4$
- c)  $z = 8.4$
- e)  $r = 7$
- f)  $h = -23.2$

