

11-20-18

Aim: SWBAT simplify expressions with rational numbers.

HW: Packet Page 21

Do Now: Correct hw, then Quiz

HOMEWORK

Simplify each expression.

$$1) \quad -5.31x + 8.3 - 4.2 - 8.07x$$

$$-13.38x + 4.1$$

$$2) \quad -20.27x - 5.2 + 3.8 + 12.51x$$

$$-7.76x - 1.4$$

$$3) \quad \frac{7}{10} - \frac{2}{5}x + 0.3 - \frac{1}{5}x$$

$$-\frac{3}{5}x + 1$$

$$4) \quad \frac{9}{12}x - \frac{3}{8} + \frac{3}{8} - \frac{1}{3}x$$

$$\frac{5}{12}x$$

+ : keep group's signs
 - : change group's signs

$$5) \quad (0.4x + 0.3) + \left(\frac{1}{2} - \frac{4}{5}x\right)$$

$$0.4x + 0.3 + \frac{1}{2} - \frac{4}{5}x$$

$$-\frac{2}{5}x + \frac{4}{5}$$

$$6) \quad \left(\frac{1}{9}x + \frac{1}{5}\right) - \left(\frac{2}{3}x - \frac{1}{7}\right)$$

$$\frac{1}{9}x + \frac{1}{5} - \frac{2}{3}x + \frac{1}{7}$$

$$-\frac{5}{9}x + \frac{12}{35}$$

OR


$$-0.4x + 0.8$$

$$\cdot \frac{1}{2} = \div 2$$

$$\cdot \frac{1}{3} = \div 3$$

$$\cdot \frac{1}{4} = \div 4$$

$$\cdot \frac{1}{5} = \div 5$$

$$\cdot \frac{1}{10} = \div 10$$


Aim: SWBAT simplify expressions with rational numbers.

CLASSWORK:

$$-0.5 = -\frac{1}{2} = \div -2$$

1) $\frac{1}{4}(8x - 20) - 7x - 5$

$$\boxed{2x} - 5 \boxed{-7x} - 5$$

$$-5x - 10$$

2) $-0.5(-8x - 2y + 4)$

$$4x + y - 2$$

$$0.1 = \frac{1}{10} = \div 10 \sim$$

3) $0.1(22x + 4x) + 1.3x + 2.5$

$$\boxed{2.2x + 0.4x} + 1.3x + 2.5$$

$$3.9x + 2.5$$

4) $\frac{2}{5}(10x - 20) - 9x - 15$

$$\boxed{4x} - 8 \boxed{-9x} - 15$$

$$-5x - 23$$

5) $0.5(-80x - 28y) + 47 - 16$

6) $7x + \frac{1}{6}(18x - 24) - 19$

7) $-0.5(84 - 26x) - (48x + 36)$

8) $-15x - \frac{1}{7}(-49x + 63) - 11$

$$-15x + 7x - 9 - 11$$

$$-8x - 20$$

$$* 9) 25x + \frac{3}{4}(16x + 40) - 55$$

$$25x + 12x + 30 - 55$$

$$37x - 25$$

$$10) -32 + \frac{4}{9}(72x - 90) + 13x$$

$$* 11) -10x - \frac{2}{3}(-9x + 27) - 12$$

$$-10x + 6x - 18 - 12$$

$$-4x - 30$$

$$12) 0.2(18x + 9) + x + 3.1$$

$$13) -0.5(20x - 13) - 9x + 3.2$$

$$* 14) \frac{2}{11}(33xy - 55) + 7xy - 10$$

$$6xy - 10 + 7xy - 10$$

$$13xy - 20$$

HOMEWORK

Simplify each expression.

1) $15x + \frac{1}{8}(64x - 32) + 30$

2) $0.5(28x + 30) + 13x + 31$

3) $20x + \frac{3}{10}(-70x + 100) + 57$

4) $\frac{1}{5}(25x + 50) - 7x + 21$

5) $-\frac{1}{4}(24x - 36) - 8x - 15$

6) $0.3(2x + 7) - 5x + 3.1$

7) $\frac{2}{3}(18x - 27) + 6x - 4$

8) $-5x + \frac{1}{6}(60x - 36) - 9$