

11-27-17

Aim: SWBAT simplify expressions with rational numbers.

Do Now: Correct hw

HW: 2 Worksheets

Test Friday

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

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

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

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



$$\cdot \frac{2}{5} = \div 5 \text{ then } \cdot 2$$

$$\cdot \frac{3}{4} = \div 4 \text{ then } \cdot 2$$

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

$$-42 + 13x - 48x - 36$$

$$-35x - 78$$

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

$$-32 + 32x - 40 + 13x$$

$$45x - 72$$

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

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

$$-4x - 30$$

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

$$3.6x + 1.8 + x + 3.1$$

$$4.6x + 4.9$$

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

$$-10x + 6.5 - 9x + 3.2$$

$$-19x + 9.7$$

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

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

$$13xy - 20$$

AIM: SWBAT simplify expressions with rational numbers.

DO NOW:

Simplify each expression.

1) $(-5.7x + 8.6) - (15.2 + 2.5x)$

2) $(\frac{3}{4}x - \frac{1}{4}) - (\frac{3}{5}x - \frac{5}{6})$

CLASSWORK:

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

$2x - 5 - 7x - 5$

$-5x - 10$

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

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

$2.2x + 0.4x + 1.3x + 2.5$

$3.9x + 2.5$

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

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

$-40x - 14y + 47 - 16$

$-40x - 14y + 31$

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

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

$4x + y - 2$

$\cdot \frac{2}{5} = \div 5, \text{ then } \cdot 2$

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

$4x - 8 - 9x - 15$

$-5x - 23$

$\cdot \frac{1}{6} = \div 6$

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

$7x + 3x - 4 - 19$

$10x - 23$

HOMEWORK - SIMPLIFY EXPRESSIONS WITH RATIONAL NUMBERS

Simplify each expression.

Any problems with fractions, your final answer needs to be A FRACTION IN SIMPLEST FORM!

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

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

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

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

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

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

$$\boxed{\frac{1}{9}x} + \boxed{\frac{1}{5}} - \boxed{\frac{2}{3}x} + \boxed{\frac{1}{7}}$$
$$-\frac{5}{9}x + \frac{12}{35}$$

HOMEWORK - SIMPLIFYING EXPRESSIONS WITH RATIONAL NUMBERS

Simplify each expression.

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

$$\boxed{15x + 8x} \quad \boxed{-4} \quad \boxed{+30}$$

$$23x + 26$$

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

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

$$\boxed{20x - 21x} \quad \boxed{+30} \quad \boxed{+57}$$

$$-x + 87$$

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