

11-22-17

Aim: SWBAT simplify expressions with rational numbers.

Do Now: Correct hw

HW: Finish Classwork

AIM: SWBAT simplify expressions with rational numbers.

DO NOW:

Simplify each expression.

1) $(x + 8) + (-3 + 5x)$

2) $(12x - 15) - (x + 5)$

CLASSWORK:

Simplify each expression.

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

1) $-0.5 - 0.8x - 2.34 + 2.5x$

$$1.7x - 2.84$$

2) $\frac{1}{5}x - \frac{1}{2} + \frac{3}{5}x - \frac{6}{10}$

$$\frac{4}{5}x - \frac{11}{10}$$

3) $-2.2 + 3.47y - 1.3 + 2.05y$

$$5.52y - 3.5$$

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

$$\frac{5}{6}x - \frac{3}{4}$$

5) $-3.72x + 10.2 - 1.5 - 2.05x$

$$-5.77x + 8.7$$

6) $-2.27x + 5.2 + 1.48 - 8.5x$

$$-10.77x + 6.68$$

7) $\frac{7}{10} - \frac{2}{3}x + 0.4 - \frac{1}{3}x$

$$-x + \frac{11}{10}$$

8) $\frac{6}{5}x \left[-\frac{3}{8} + \frac{3}{8} \right] - \frac{1}{3}x$

$$\frac{13}{15}x$$

9) $(0.2x + 0.8) + (2\frac{1}{2} - \frac{4}{5}x)$

$$0.2x + 0.8 + 2\frac{1}{2} - \frac{4}{5}x$$

$$-\frac{3}{5}x + \frac{33}{10} \text{ OR } -0.6x + 3.3$$

10) $(\frac{1}{8}x + \frac{1}{2}) - (\frac{3}{4}x - \frac{1}{2})$

$$\frac{1}{8}x + \frac{1}{2} - \frac{3}{4}x + \frac{1}{2}$$

$$-\frac{5}{8}x + 1$$

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

$$\frac{5}{6}x - 1\frac{1}{3} + \frac{2}{3}x - 1\frac{5}{6}$$

$$\frac{3}{2}x - \frac{19}{6}$$

12) $(3.2x + 5.8) + (2\frac{1}{5}x - 3\frac{1}{2})$

$$3.2x + 5.8 + 2\frac{1}{5}x - 3\frac{1}{2}$$

$$\frac{27}{5}x - \frac{23}{10}$$

$$\text{OR } 5.4x - 2.3$$

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

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

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

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



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

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

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

$7x + 3x - 4 - 19$

$10x - 23$

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

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

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

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

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

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

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

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