

Name: _____

Mr. Williams

Date: _____

Rational Numbers

Topic: Rational Numbers

Homework

Directions: All Answers must be shown on a separate sheet of paper!

Add. Write fractions in simplest form.

1. $\frac{5}{16} + \left(-\frac{7}{16}\right)$

2. $\frac{3}{5} + \left(-\frac{4}{15}\right)$

3. $-\frac{7}{2} + 3\frac{2}{3}$

4. $5.6 + (-1.3)$

5. $-8.2 + 5.4$

6. $7.15 + (-12.76)$

7. Describe and correct the error in finding the sum.

$$\times \quad \frac{3}{10} + \left(-\frac{1}{10}\right) = \frac{3+1}{10} = \frac{4}{10} = \frac{2}{5}$$

Evaluate the expression when $x = \frac{1}{2}$ and $y = -\frac{2}{5}$.

8. $-x + y$

9. $x + 2y$

10. $|x + y|$

11. The temperature is -12.6 degrees Celsius. The temperature goes up 7.9 degrees. What is the new temperature?12. You finish $\frac{3}{8}$ of the project. Your friend finishes $\frac{1}{4}$ of the project. What fraction of the project is finished?

Add. Write fractions in simplest form.

13. $5 + \left(-2\frac{1}{3}\right) + \left(-3\frac{1}{6}\right)$

14. $-4\frac{1}{5} + 3\frac{2}{3} + \left(-1\frac{2}{5}\right)$

15. $-12.4 + 19.1 + (-4.3)$

16. Determine if the following statements are *always*, *sometimes*, or *never* true.

- When adding two negative rational numbers, the sum will be negative.
- When adding two rational numbers with different signs, the sum will be zero.
- When adding two positive rational numbers, the sum will be zero.
- When adding two rational numbers with different signs, the sum will be negative.