

Name: \_\_\_\_\_

Mr. Williams

Date: \_\_\_\_\_

Class: \_\_\_\_\_

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.  $56 + (-13)$

5.  $-82 + 54$

6.  $-15 + (-12 - 6)$

7. Describe and correct the error in finding the sum

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

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

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

15.  $124 + 191 + (-43)$

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

### Extra Practice

Add. Write fractions in simplest form.

1.  $-\frac{4}{5} + \frac{3}{20}$

2.  $-8 + \left(-\frac{6}{7}\right)$

3.  $1\frac{2}{15} + \left(-3\frac{1}{2}\right)$

4.  $-\frac{1}{6} + \left(-\frac{5}{12}\right)$

5.  $\frac{9}{10} + (-3)$

6.  $-5\frac{3}{4} + \left(-4\frac{5}{6}\right)$

7.  $0.46 + (-0.642)$

8.  $0.13 + (-5.7)$

9.  $-2.57 + (-3.48)$

10. Before a race, you start  $4\frac{5}{8}$  feet behind your friend. At the halfway point, you are  $3\frac{2}{3}$  feet ahead of your friend. What is the change in distance between you and your friend from the beginning of the race?