Name_____ Date_____

2.2 Practice A

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.

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

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.

a. When adding two negative rational numbers, the sum will be negative.

b. When adding two rational numbers with different signs, the sum will be zero.

c. When adding two positive rational numbers, the sum will be zero.

d. When adding two rational numbers with different signs, the sum will be negative.