More Adding and Subtracting Fractions

In 1 through 12, simplify each expression.

1.
$$\frac{4}{6} + \frac{2}{9}$$

2.
$$\frac{2}{7} + \frac{1}{2}$$

1.
$$\frac{4}{6} + \frac{2}{9}$$
 ____ **2.** $\frac{2}{7} + \frac{1}{2}$ ____ **3.** $\frac{8}{12} + \frac{1}{6}$ ____

4.
$$\frac{3}{8} + \frac{1}{6}$$

5.
$$\frac{1}{12} + \frac{7}{9}$$
 _____ **6.** $\frac{4}{18} + \frac{2}{9}$ ____ **7.** $\frac{1}{3} + \frac{1}{4}$ ____ **8.** $\frac{5}{15} + \frac{3}{5}$ ____

6.
$$\frac{4}{18} + \frac{2}{9}$$

7.
$$\frac{1}{3} + \frac{1}{4}$$

8.
$$\frac{5}{15} + \frac{3}{5}$$

9.
$$\frac{1}{2} - \left(\frac{1}{8} + \frac{1}{8}\right)$$

10.
$$\frac{3}{4} + \left(\frac{1}{4} - \frac{1}{6}\right)$$

9.
$$\frac{1}{2} - \left(\frac{1}{8} + \frac{1}{8}\right)$$
 10. $\frac{3}{4} + \left(\frac{1}{4} - \frac{1}{6}\right)$ **11.** $\left(\frac{1}{2} + \frac{3}{20}\right) - \frac{2}{20}$ **12.** $\left(\frac{2}{5} + \frac{1}{5}\right) - \frac{3}{10}$

12.
$$\left(\frac{2}{5} + \frac{1}{5}\right) - \frac{3}{10}$$

13. A plumber is fitting a water pipe that is $\frac{3}{4}$ foot long on to a water pipe that is $\frac{2}{12}$ foot long. How long will the finished pipe be?

A
$$\frac{11}{12}$$
 foot **C** $\frac{2}{12}$ foot

$$\mathbf{C} = \frac{2}{12}$$
 foot

B
$$\frac{8}{16}$$
 foot

14. Joel made some muffins. He gave $\frac{1}{4}$ of the muffins to a neighbor. He took $\frac{3}{8}$ of the muffins to school. What fraction of the

A
$$\frac{4}{12}$$

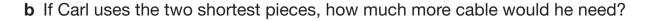
muffins is left?

C
$$\frac{5}{12}$$

B
$$\frac{3}{8}$$

D
$$\frac{8}{8}$$

- **15.** Carl has three lengths of cable, $\frac{5}{6}$ yard long, $\frac{1}{4}$ yard long, and $\frac{2}{3}$ yard long. He needs at least 1 yard of cable.
 - a Which two pieces together make a length at least 1 yard and closest to 1 yard?



c After Carl has used 1 yard of cable, how much cable will he have left? Explain how you found your answer.