Estimate, Then Solve: Fractions

Name: _____

Grade 5 · Estimate first, then add or subtract exactly and compare

Estimate first Round each fraction to 0, $\frac{1}{2}$ or 1 and estimate. Then find the exact answer in simplest form. It should be close to your estimate.

A. Estimate. Then find the exact answer in simplest form.

1. $\frac{7}{8} + \frac{7}{12}$ ≈ ☐ Exact: ☐/☐

2. $\frac{11}{12} - \frac{3}{8}$ ≈ ☐ Exact: ☐/☐

3. $\frac{1}{8} + \frac{11}{12}$ ≈ ☐ Exact: ☐/☐

4. $\frac{8}{9} - \frac{1}{2}$ ≈ ☐ Exact: ☐/☐

5. $\frac{3}{8} + \frac{1}{12}$ ≈ ☐ Exact: ☐/☐

6. $\frac{5}{8} + \frac{11}{12}$ ≈ ☐ Exact: ☐/☐

7. $\frac{9}{10} - \frac{1}{2}$ ≈ ☐ Exact: ☐/☐

8. $\frac{4}{9} + \frac{1}{2}$ ≈ ☐ Exact: ☐/☐

B. Round each mixed number to the nearest whole number to estimate. Then solve.

9. A hike is $5\frac{1}{8}$ miles long. Ray has walked $2\frac{7}{8}$ miles. How many miles does he have left?

   Estimate: _____ miles

   Exact: ☐ ☐/☐ miles

10. A pancake recipe uses $2\frac{1}{4}$ cups of flour and $1\frac{7}{8}$ cups of milk. How many cups is that in all?

    Estimate: _____ cups

    Exact: ☐ ☐/☐ cups

11. A board is $4\frac{7}{8}$ feet long. Mia cuts off $1\frac{5}{6}$ feet. How long is the board now?

    Estimate: _____ feet

    Exact: ☐ ☐/☐ feet

12. A puppy weighs $3\frac{1}{5}$ pounds and a kitten $2\frac{9}{10}$ pounds. How much do they weigh in all?

    Estimate: _____ pounds

    Exact: ☐ ☐/☐ pounds

Estimate, Then Solve: Fractions (Answer Key)

Grade 5 · Estimate first, then add or subtract exactly and compare

Estimate first Round each fraction to 0, $\frac{1}{2}$ or 1 and estimate. Then find the exact answer in simplest form. It should be close to your estimate.

A. Estimate. Then find the exact answer in simplest form.

1. $\frac{7}{8} + \frac{7}{12}$ ≈ $1\frac{1}{2}$ Exact: $1\frac{11}{24}$

2. $\frac{11}{12} - \frac{3}{8}$ ≈ $\frac{1}{2}$ Exact: $\frac{13}{24}$

3. $\frac{1}{8} + \frac{11}{12}$ ≈ 1 Exact: $1\frac{1}{24}$

4. $\frac{8}{9} - \frac{1}{2}$ ≈ $\frac{1}{2}$ Exact: $\frac{7}{18}$

5. $\frac{3}{8} + \frac{1}{12}$ ≈ $\frac{1}{2}$ Exact: $\frac{11}{24}$

6. $\frac{5}{8} + \frac{11}{12}$ ≈ $1\frac{1}{2}$ Exact: $1\frac{13}{24}$

7. $\frac{9}{10} - \frac{1}{2}$ ≈ $\frac{1}{2}$ Exact: $\frac{2}{5}$

8. $\frac{4}{9} + \frac{1}{2}$ ≈ 1 Exact: $\frac{17}{18}$

B. Round each mixed number to the nearest whole number to estimate. Then solve.

9. A hike is $5\frac{1}{8}$ miles long. Ray has walked $2\frac{7}{8}$ miles. How many miles does he have left?

Estimate: 2 miles **5 – 3 = 2**

Exact: $2\frac{1}{4}$ miles

10. A pancake recipe uses $2\frac{1}{4}$ cups of flour and $1\frac{7}{8}$ cups of milk. How many cups is that in all?

Estimate: 4 cups **2 + 2 = 4**

Exact: $4\frac{1}{8}$ cups

11. A board is $4\frac{7}{8}$ feet long. Mia cuts off $1\frac{5}{6}$ feet. How long is the board now?

Estimate: 3 feet **5 – 2 = 3**

Exact: $3\frac{1}{24}$ feet

12. A puppy weighs $3\frac{1}{5}$ pounds and a kitten $2\frac{9}{10}$ pounds. How much do they weigh in all?

Estimate: 6 pounds **3 + 3 = 6**

Exact: $6\frac{1}{10}$ pounds