

**Solve. Explain why your answer is reasonable.**

*Show your work.*

- ① Zoe had a board  $5\frac{1}{4}$  feet long. She cut off a piece. Now the board is  $3\frac{5}{6}$  feet long. How long was the piece she cut off?

Answer: \_\_\_\_\_

Why is the answer reasonable?

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- ② A rectangle has a length of  $10\frac{3}{16}$  inches and a width of  $6\frac{7}{8}$  inches. What is the perimeter of the rectangle?

Answer: \_\_\_\_\_

Why is the answer reasonable?

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- ③ Max is making trail mix. He combines  $\frac{2}{5}$  pound of dried fruit and  $\frac{1}{3}$  pound of mixed nuts. He adds sunflower seeds to make a total of 1 pound. What is the weight of the seeds?

Answer: \_\_\_\_\_

Why is the answer reasonable?

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- ④ At the start of party, a bowl contains 16 pints of punch. Guests drink  $10\frac{1}{4}$  pints. Then the host adds another  $7\frac{1}{2}$  pints to the bowl. How much punch is in the bowl now?

Answer: \_\_\_\_\_

Why is the answer reasonable?

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Tell whether the answer is reasonable or unreasonable. Explain how you decided.

1  $\frac{8}{9} + \frac{1}{10} = \frac{39}{90}$

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2  $5\frac{1}{6} - 4\frac{2}{7} = 2\frac{37}{42}$

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3  $\frac{11}{12} - \frac{7}{8} = \frac{1}{24}$

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4  $5\frac{5}{6} + 1\frac{3}{4} = 5\frac{1}{12}$

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Add or subtract.

5  $\frac{7}{8} + \frac{5}{8} =$  \_\_\_\_\_

6  $\frac{4}{7} + \frac{2}{3} =$  \_\_\_\_\_

7  $\frac{7}{15} - \frac{3}{10} =$  \_\_\_\_\_

8  $\frac{3}{4} - \frac{5}{12} =$  \_\_\_\_\_

9  $5\frac{4}{5} - 2\frac{1}{3} =$  \_\_\_\_\_

10  $7\frac{5}{6} + 2\frac{11}{12} =$  \_\_\_\_\_

Compare.

11  $\frac{5}{8} \bigcirc \frac{5}{9}$

12  $1\frac{7}{12} \bigcirc 1\frac{2}{3}$

13  $\frac{5}{9} \bigcirc \frac{3}{7}$

14  $\frac{1}{89} \bigcirc \frac{1}{90}$

15  $\frac{5}{18} \bigcirc \frac{2}{9}$

16  $\frac{65}{66} \bigcirc \frac{55}{56}$

Solve.

- 17 **Stretch Your Thinking** Find two mixed numbers such that when you estimate their sum by rounding to the nearest whole number you get a *different* estimate than when you round to the nearest half. Demonstrate that your numbers satisfy this condition.

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