

Homework**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?

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?

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?

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?

Remembering

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

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

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

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

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

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.
