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## 2.3 Exercises





## Vocabulary and Concept Check

- **1. VOCABULARY** What is the reciprocal of  $7\frac{1}{3}$ ?
- **2. NUMBER SENSE** Is  $5\frac{1}{4} \div 3\frac{1}{2}$  the same as  $3\frac{1}{2} \div 5\frac{1}{4}$ ? Explain.

NUMBER SENSE Is the reciprocal of an improper fraction sometimes, always, or never a proper fraction? Explain. 4. DIFFERENT WORDS, SAME QUESTION Which is different? Find "both" answers.

What is  $5\frac{1}{2}$  divided by  $\frac{1}{8}$ ? Find the quotient of  $5\frac{1}{2}$  and  $\frac{1}{8}$ .

What is  $5\frac{1}{2}$  times 8?

Find the product of  $5\frac{1}{2}$  and  $\frac{1}{8}$ .

21. ERROR ANALYSIS Describe and correct the error in finding the quotient.

$$3\frac{1}{2} \div 1\frac{2}{3} = 3\frac{1}{2} \times 1\frac{3}{2} = \frac{7}{2} \times \frac{5}{2} = \frac{35}{4} = 8\frac{3}{4}$$

**23. HAMBURGERS** How many  $\frac{1}{4}$ -pound hamburgers can you make from  $3\frac{1}{2}$  pounds of ground beef?

Evaluate the expression. Write the answer in simplest form.

**26.** 
$$3 \div 1\frac{1}{5} + \frac{1}{2}$$

**28.** 
$$\frac{2}{5} + 2\frac{1}{6} \div \frac{5}{6}$$

**30.** 
$$6\frac{1}{2} - \frac{7}{8} \div 5\frac{11}{16}$$

**34.** 
$$4\frac{3}{8} \div \frac{3}{4} \times \frac{4}{7}$$

**38. TRAIL MIX** You have 12 cups of granola and  $8\frac{1}{2}$  cups of peanuts to make trail mix. What is the greatest number of full batches of trail mix you can make? Explain how you found your answer.



40. Reasoning: At a track meet, the longest shot-put throw by a boy is 25 feet 8 inches. The longest shot-put throw by a girl is 19 feet 3 inches. How many times greater is the longest shot-put throw by the boy than by the girl?