

# Dividing Whole Numbers by Fractions Assessment **Answers**

**Completion: Use these models to answer the questions.**

**1.** Represent how many quarter hours are in 6 hours using the boxes below:

Answer: **Students divide each of the six boxes into 4 equal parts for a total of 24 small boxes.**

**2.** Represent how many eighths of a mile are in 3 miles using the boxes below:

Answer: **Students divide each of the 3 boxes into 8 equal parts for a total of 24 small boxes.**

**Calculations: Solve each problem. Show the steps of your work.**

**1.**  $6 \div \frac{1}{4} = 6 \times \frac{4}{1} = 24$

**2.**  $9 \div \frac{1}{8} = 9 \times \frac{8}{1} = 72$

**3.**  $10 \div \frac{1}{3} = 10 \times \frac{3}{1} = 30$

**4.**  $2 \div \frac{1}{3} = 2 \times \frac{3}{1} = 6$

**5.**  $5 \div \frac{1}{10} = 5 \times \frac{10}{1} = 50$

**6.**  $3 \div \frac{3}{7} = 3 \times \frac{7}{3} = 7$

**7.**  $12 \div \frac{2}{12} = 12 \times \frac{12}{2} = 72$

**8.**  $12 \div \frac{3}{5} = 12 \times \frac{5}{3} = 20$

**9.**  $10 \div \frac{5}{8} = 10 \times \frac{8}{5} = 16$

**10.**  $7 \div \frac{3}{4} = 7 \times \frac{4}{3} = 9 \frac{1}{3}$

**Word Problems: Use the space provided to show the steps.**

**1.** Jenny made 5 pitchers of homemade lemonade. The 5 pitchers of lemonade were divided by  $\frac{1}{3}$ . How many of these servings of lemonade can Jenny share?

answer: **5 divided by  $\frac{1}{3}$  = 15 servings can be shared**

**2.** Darrion visited a candy store in New York City. He bought 4 pounds of candied chocolates to give out to classmates. He would like to give each friend  $\frac{1}{4}$  of a pound of chocolates to take home. How many classmates can he surprise with this amount of chocolates?

answer: **4 divided by  $\frac{1}{4}$  = 16 classmates can be surprised**

**3.** Lulu has 6 feet of string. She cuts it into  $\frac{1}{4}$  foot lengths to create friendship bracelets. How many pieces of string does Lulu have to create bracelets?

answer: **6 divided by  $\frac{1}{4}$  = 24 pieces of string**

**4.** Kim has 4 pizzas. He cut each pizza into fifths. How many slices of pizza does Kim have to share?

answer: **4 divided by  $\frac{1}{5}$  = 20 pieces of pizza**

**5.** Carlos is assigned to bring refreshments for all of the teams in a tournament. He buys 5 multipacks of juice boxes, each containing 24 juice boxes. He divides the multipacks into thirds and gives them out to teams. How many 8-person teams can receive refreshments?

answer: **5 divided by  $\frac{1}{3}$  = 15 teams**

**6.** The local baker made 24 cakes for the town's bicentennial. He cut each cake into eighths. How many slices of cake was he able to serve at the big event?

answer: **24 divided by  $\frac{1}{8}$  = 192 slices of cake**

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

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1. Jenny made 5 pitchers of homemade lemonade. The 5 pitchers of lemonade were divided by  $\frac{1}{3}$ . How many of these servings of lemonade can Jenny share?

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2.

Darrion visited a candy store in New York City. He bought 4 pounds of candied chocolates to give out to classmates. He would like to give each friend  $\frac{1}{4}$  of a pound of chocolates to take home. How many classmates can he surprise with this amount of chocolates?

answer: \_\_\_\_\_

3.

Lulu has 6 feet of string. She cuts it into  $\frac{1}{4}$  foot lengths to create friendship bracelets. How many pieces of string does Lulu have to create bracelets?

answer: \_\_\_\_\_

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Kim has 4 pizzas. He cut each pizza into fifths. How many slices of pizza does Kim have to share?

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Carlos is assigned to bring refreshments for all of the teams in a tournament. He buys 5 multipacks of juice boxes, each containing 24 juice boxes. He divides the multipacks into thirds and gives them out to teams. How many 8-person teams can receive refreshments?

answer: \_\_\_\_\_

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The local baker made 24 cakes for the town's bicentennial. He cut each cake into eighths. How many slices of cake was he able to serve at the big event?

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