Dividing Fractions in Context

ANSWER KEY • Amplify Alignment: Grade 6 Accelerated, Unit 3, Lesson 5

Problems 1–4: Calculate the value of each expression. Draw a diagram if it helps with your thinking.

1. $6 \div \frac{3}{4}$ **8**

2. $2\frac{1}{2} \div \frac{5}{6}$ **3**

3. $\frac{7}{2} \div 1\frac{1}{6}$ **3**

4. $3\frac{1}{3} \div \frac{5}{9}$ **6**

Problems 5–6: Ella picked $2\frac{1}{2}$ cups of peaches, which is enough for $\frac{5}{6}$ of a peach pie.

5. **How many cups of peaches does Ella need for 1 whole pie? Show or explain your thinking.**

   $2\frac{1}{2} \div \frac{5}{6} = 3$ cups. Each sixth of the pie uses $\frac{1}{2}$ cup, and $6 \times \frac{1}{2} = 3$.

6. **How many pies can Ella make with $7\frac{1}{2}$ cups of peaches? Show or explain your thinking.**

   $7\frac{1}{2} \div 3 = 2\frac{1}{2}$ pies

7. One batch of salsa uses $1\frac{1}{4}$ pounds of tomatoes. Luis has 4 pounds of tomatoes. He says he can make $3\frac{1}{5}$ batches of salsa. Is Luis correct? Explain your thinking.

Yes. $4 \div 1\frac{1}{4} = 4 \cdot \frac{4}{5} = \frac{16}{5} = 3\frac{1}{5}$ batches.

8. After charging for $1\frac{1}{2}$ hours, a tablet is at $\frac{3}{4}$ of its full battery. How long will it take to charge the tablet completely? Show or explain your thinking.

$1\frac{1}{2} \div \frac{3}{4}$ = 2 hours. Each fourth of the battery takes $\frac{1}{2}$ hour, so 4 fourths take 2 hours.

9. Grace has $4\frac{1}{2}$ cups of juice. Each serving is $\frac{3}{4}$ cup. How many servings does she have?

$4\frac{1}{2} \div \frac{3}{4}$ = 6 servings

10. Write a story problem that could be solved by calculating $3 \div \frac{1}{2}$. Then solve it.

Sample: Ivan has 3 yards of ribbon and cuts it into $\frac{1}{2}$-yard pieces. How many pieces does he get? $3 \div \frac{1}{2}$ = 6 pieces.