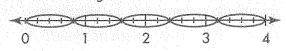**Set A,** pages 202–203

Find $4 \div \frac{4}{5}$. Use a number line.

Divide 4 into $\frac{4}{5}$ parts.

$4 \div \frac{4}{5} = 5$

Remember that when the divisor is less than 1, the quotient is larger than the dividend.

1. $7 \div \frac{1}{2}$

2. $6 \div \frac{2}{5}$

3. $2 \div \frac{1}{8}$

4. $\frac{8}{9} \div \frac{4}{9}$

5. $\frac{2}{3} \div 2$

6. $\frac{3}{4} \div 6$

Set B, pages 204–207

Find $4 \div \frac{8}{13}$.

Dividing by a fraction is the same as multiplying by its reciprocal.

$4 \div \frac{8}{13} = 4 \times \frac{13}{8}$ Use the reciprocal of the divisor to rewrite the problem.

$\frac{{}^1\cancel{4}}{1} \times \frac{13}{\cancel{8}^2} = \frac{13}{2}$ or $6\frac{1}{2}$ Look for common factors and simplify.

Find $\frac{3}{4} \div \frac{5}{8}$.

$\frac{3}{4} \div \frac{5}{8} = \frac{3}{4} \times \frac{8}{5}$ Rewrite the problem as a multiplication problem.

$\frac{3}{\cancel{4}} \times \frac{\cancel{8}^2}{5} = \frac{6}{5}$ or $1\frac{1}{5}$ Simplify. Then, multiply.

Remember that the product of a number and its reciprocal is 1.

1. $25 \div \frac{4}{9}$

2. $12 \div \frac{3}{5}$

3. $8 \div \frac{5}{7}$

4. $\frac{7}{8} \div \frac{1}{4}$

5. $\frac{1}{3} \div \frac{3}{5}$

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

7. $\frac{5}{6} \div \frac{3}{8}$

8. $\frac{1}{3} \div \frac{1}{2}$

9. $5 \div \frac{5}{16}$

10. $\frac{7}{12} \div \frac{3}{4}$

11. $\frac{8}{9} \div \frac{2}{3}$

12. $\frac{2}{7} \div \frac{2}{7}$

Set C, pages 208–209

Estimate $3\frac{1}{5} \div 8\frac{3}{4}$ using rounding or compatible numbers.

$3\frac{1}{5} \div 8\frac{3}{4} \approx 3 \div 9$ Round to the nearest whole number. $\frac{1}{5} < \frac{1}{2}$ and $\frac{3}{4} > \frac{1}{2}$.

$3 \div 9 = \frac{3}{9}$ or $\frac{1}{3}$ $3\frac{1}{5}$ and $8\frac{3}{4}$ round to 3 and 9.

So, $3\frac{1}{5} \div 8\frac{3}{4} \approx \frac{1}{3}$.

Remember that you can estimate using compatible numbers.

1. $\frac{7}{9} \div 16$

2. $24\frac{4}{10} \div 6\frac{1}{3}$

3. $3\frac{5}{6} \div 8\frac{2}{7}$

4. $27 \div 3\frac{2}{5}$

5. $36\frac{3}{8} \div 12\frac{2}{5}$

6. $3\frac{11}{12} \div 4\frac{4}{5}$

Set D, pages 210–211

Find $6\frac{1}{2} \div 1\frac{1}{6}$. Estimate. $6\frac{1}{2} \div 1\frac{1}{6} \approx 6$

$6\frac{1}{2} \div 1\frac{1}{6} = \frac{13}{2} \div \frac{7}{6}$ Write the mixed numbers as improper fractions.

$\frac{13}{2} \div \frac{7}{6} = \frac{13}{2} \times \frac{6}{7}$ Then write the problem as a multiplication problem using the reciprocal of the divisor.

$\frac{13}{\cancel{2}} \times \frac{\cancel{6}^3}{7} = \frac{39}{7}$ or $5\frac{4}{7}$ Simplify. Then, multiply.

$5\frac{4}{7}$ is close to the estimate of 6.

Remember to estimate before solving the problem so you can check the reasonableness of your answer.

Find each quotient.

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

2. $9 \div 2\frac{2}{7}$

3. $3\frac{3}{5} \div 1\frac{1}{5}$

4. $5\frac{1}{2} \div 3\frac{3}{8}$

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

6. $12\frac{1}{6} \div 3$

Set E, pages 212–213

Find $w + 4\frac{1}{3} = 7$.

Subtract $4\frac{1}{3}$ from both sides.

$w + 4\frac{1}{3} - 4\frac{1}{3} = 7 - 4\frac{1}{3}$

$w = 2\frac{2}{3}$

Remember that you can use inverse relationships and properties of equality to solve each equation.

1. $g + 3\frac{5}{8} = 7\frac{1}{4}$

2. $b \div 15 = 8\frac{1}{3}$

3. $\frac{7}{9}y = 49$

Set F, pages 214–215

If the pattern continues, how tall will the plants be at the end of 5 weeks?

Week	1	2	3	4	5
Plant Growth (in.)	$2\frac{1}{2}$	5	$7\frac{1}{2}$	▨	▨

The plants grew $2\frac{1}{2}$ inches during Week 1.

$2\frac{1}{2} + 2\frac{1}{2} = 5$; $5 + 2\frac{1}{2} = 7\frac{1}{2}$ Check the pattern for Weeks 2 and 3.

$7\frac{1}{2} + 2\frac{1}{2} = 10$; $10 + 2\frac{1}{2} = 12\frac{1}{2}$ Use the pattern to solve the problem.

The plants will be $12\frac{1}{2}$ in. at the end of 5 weeks.

Remember to look for a pattern by finding relationships between numbers, figures, or expressions. Find the missing numbers.

1. $\frac{1}{17}$, $\frac{3}{17}$, $\frac{6}{17}$, $\frac{10}{17}$, ▨, ▨

2. 12, $13\frac{1}{3}$, $14\frac{2}{3}$, 16, ▨, ▨

3. $\frac{5}{18}$, $\frac{4}{18}$, $\frac{3}{18}$, ▨, ▨

4. $1\frac{1}{2}$, $1\frac{1}{4}$, 1, $\frac{3}{4}$, ▨, ▨