Name _____ Date _____

Skills Maintenance

Reciprocals

Activity 1

Tell the reciprocal for each number.

Model

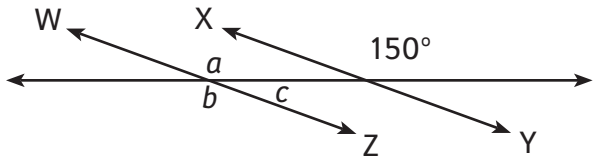
What is the reciprocal of 3?
Remember that 3 may be written as $\frac{3}{1}$.
The reciprocal of 3 is $\frac{1}{3}$.

1. What is the reciprocal of 4? _____
2. What is the reciprocal of $\frac{1}{4}$? _____
3. What is the reciprocal of $\frac{2}{3}$? _____
4. What is the reciprocal of 10? _____

Inferences About Angles

Activity 2

Lines XY and WZ are parallel. Find the missing angle measures.



1. What is the measure of $\angle a$? _____
2. What is the measure of $\angle b$? _____
3. What is the measure of $\angle c$? _____

Name _____ Date _____

Apply Skills

More on Fractions as Coefficients

Activity 1

Convert each of the fractions by writing them as a product of 1 over the denominator and the numerator over 1.

Model $\frac{3}{2} = \frac{1}{2} \cdot \frac{3}{1}$

1. $\frac{4}{5} =$ _____ • _____

2. $\frac{2}{3} =$ _____ • _____

3. $\frac{8}{9} =$ _____ • _____

4. $\frac{3}{4} =$ _____ • _____

Name _____ Date _____

Activity 2

Solve the equations. Rewrite the fraction as the product of 1 over the denominator and the numerator over 1.

Model

$\frac{x+1}{2} = 12$

Answer $\frac{1}{2}(x+1) = 12$

$2 \cdot \frac{1}{2}(x+1) = 12 \cdot 2$

$x + 1 = 24$

$x + 1 - 1 = 24 - 1$

$x + 0 = 23$

$x = 23$

Check $\frac{23+1}{2} = 12 \rightarrow \frac{24}{2} = 12 \rightarrow 12 = 12$ TRUE

1. $\frac{x}{5} = 5$

Rewrite the problem as 1 over the denominator and the numerator over 1:

_____

Solve the equation. Show your work here:

$x =$ _____

Check your work here:

2. $\frac{x+1}{2} = 2$

Rewrite the problem as 1 over the denominator and the numerator over 1:

_____

Solve the equation. Show your work here:

$x =$ _____

Check your work here:

Name _____ Date _____

3. $\frac{y+6}{6} = 3$

Rewrite the problem as 1 over the denominator and the numerator over 1:

_____

Solve the equation. Show your work here:

$y =$ _____

Check your work here:

4. $\frac{z+3}{4} = 10$

Rewrite the problem as 1 over the denominator and the numerator over 1:

_____

Solve the equation. Show your work here:

$z =$ _____

Check your work here:

Name _____ Date _____

Problem-Solving Activity

Word Problems

Solve the age problems. Use these four steps to help you solve each problem:

1. **Begin with a drawing.**
2. **Figure out how to use a variable.**
3. **Solve the equation.**
4. **Make sure the answer is what the question is asking for.**

1. Niki is 2 years younger than her brother Michael. When you combine their ages, it totals 38. How old are Niki and Michael?

_____

2. Jordan is Randall's father. Jordan is 4 times older than Randall. When you add their ages together, it is 50. How old are Jordan and Randall?

_____

3. Sherilyn has a much older cousin, Alisa, who lives in another city. Alisa is twice as old as Sherilyn. Together their ages are 24. How old are Sherilyn and Alisa?

_____

Name _____ Date _____

4. Kara is 8 years older than Leah. In 10 more years, the total of their ages will be 28. How old are Kara and Leah?

_____

5. Robert is 5 years older than Josh. Danny is 8 years older than Josh. Their total age is 43. How old are Robert, Josh, and Danny?

_____

Reinforce Understanding
Use the **mBook** ***Study Guide*** to review lesson concepts.