Reciprocals

Name _____

Date _____

Find the reciprocal.

$9 = \frac{9}{1}$ $\frac{9}{1} \diagdown \frac{1}{9}$ | $\frac{2}{3} \diagdown \frac{3}{2}$ | $1\frac{1}{4} = \frac{5}{4}$ $\frac{5}{4} \diagdown \frac{4}{5}$

$\frac{\overset{1}{\cancel{9}}}{1} \times \frac{1}{\cancel{9}} = \frac{1}{1} = 1$ | $\frac{\overset{1}{\cancel{2}}}{\underset{1}{\cancel{3}}} \times \frac{\overset{1}{\cancel{3}}}{\underset{1}{\cancel{2}}} = \frac{1}{1} = 1$ | $\frac{\overset{1}{\cancel{5}}}{\underset{1}{\cancel{4}}} \times \frac{\overset{1}{\cancel{4}}}{\underset{1}{\cancel{5}}} = \frac{1}{1} = 1$

$\frac{1}{9}$ is the reciprocal of 9. | $\frac{3}{2}$ is the reciprocal of $\frac{2}{3}$. | $\frac{4}{5}$ is the reciprocal of $1\frac{1}{4}$.

Write the missing reciprocal in each statement.

1. $8 \times$ _____ $= 1$
2. $3 \times$ _____ $= 1$
3. $\frac{1}{2} \times$ _____ $= 1$
4. $\frac{1}{5} \times$ _____ $= 1$

5. $\frac{7}{8} \times$ _____ $= 1$
6. $\frac{4}{5} \times$ _____ $= 1$
7. $1\frac{1}{2} \times$ _____ $= 1$
8. $2\frac{1}{4} \times$ _____ $= 1$

Are the numbers reciprocals? Write *Yes* or *No*.

9. $12, \frac{1}{12}$ _____
10. $\frac{1}{3}, \frac{2}{6}$ _____
11. $\frac{4}{9}, \frac{9}{4}$ _____
12. $\frac{5}{8}, \frac{8}{5}$ _____

13. $\frac{1}{10}, 10$ _____
14. $2\frac{1}{5}, \frac{5}{11}$ _____
15. $3\frac{1}{2}, \frac{2}{5}$ _____
16. $1\frac{7}{8}, \frac{8}{15}$ _____

Write the reciprocal of each number.

17. 1 _____
18. 20 _____
19. $\frac{1}{3}$ _____
20. $\frac{1}{8}$ _____

21. $\frac{9}{10}$ _____
22. $\frac{7}{12}$ _____
23. $\frac{10}{3}$ _____
24. $\frac{9}{5}$ _____

25. $\frac{14}{9}$ _____
26. $1\frac{1}{6}$ _____
27. $2\frac{3}{4}$ _____
28. $3\frac{1}{5}$ _____

Problem Solving Use the numbers in the box.

| $\frac{1}{3}$ | $\frac{5}{2}$ | $\frac{9}{4}$ | $\frac{7}{10}$ |

29. Write the fractions that are less than 1. Then write their reciprocals.

_____

30. Write the fractions that are greater than 1. Then write their reciprocals.

_____

31. What number times $\frac{5}{16}$ equals 1?

_____

32. What number times 100 equals 1?

_____

33. Use the numbers 7 and 11 to write a multiplication sentence with a product of 1.

_____

Use with Lesson 6-9, pages 214–215 in the Student Book.
C Then go to Lesson 6-10, pages 216–217 in the Student Book.

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