

Reciprocals



Find the reciprocal of a fraction or whole number by swapping the numerator and denominator.

Name _____

Date _____

Swap top and bottom

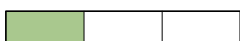
The reciprocal of a fraction swaps its numerator and denominator. To find the reciprocal of a whole number, first write it as a fraction over 1, then swap: the reciprocal of n is $\frac{1}{n}$. A number multiplied by its reciprocal always equals 1.

Worked example Find the reciprocal of $\frac{1}{4}$ using the bar.



Swap the numerator and denominator.
The reciprocal of $\frac{1}{4}$ is 4.

1. This bar shows a fraction. What is its reciprocal?



2. This shows the whole number 3. What is its reciprocal?



3. Find the reciprocal of $\frac{1}{2}$.

4. Find the reciprocal of $\frac{2}{5}$.

5. Find the reciprocal of $\frac{3}{4}$.

6. Find the reciprocal of 2.

7. Find the reciprocal of $\frac{7}{8}$.

8. Find the reciprocal of 5.

9. Fill in the blank: the reciprocal of $\frac{4}{9}$ is $\frac{\square}{\square}$.

Reciprocals (continued)



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10. Find the reciprocal of $\frac{7}{3}$.

11. Find the reciprocal of 12.

12. Are $\frac{2}{7}$ and $\frac{7}{2}$ reciprocals?

13. Is the reciprocal of 9 equal to $\frac{1}{9}$?

14. Which is greater: the reciprocal of $\frac{2}{9}$ or the reciprocal of $\frac{2}{7}$?

15. Explain in one sentence why the reciprocal of 1 is still 1.

16. A student says the reciprocal of 6 is 6. Are they correct? Explain.

17. The reciprocal of a number is $\frac{7}{12}$. What is the number?

18. If two numbers are reciprocals, what is their product?
