

DIVIDING FRACTIONS

ANSWERS

HELPFUL EXAMPLES

BEFORE DIVIDING, WE NEED TO LEARN HOW TO FIND THE **RECIPROCAL** OF A NUMBER.

A. THE RECIPROCAL OF $\frac{3}{4}$ IS $\frac{4}{3}$

TO FIND THE RECIPROCAL JUST FLIP THE FRACTION.

B. THE RECIPROCAL OF 5 NEED TO CHANGE 5 TO A FRACTION BEFORE FINDING THE RECIPROCAL.

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

FLIP IT.

THE RECIPROCAL OF 5 IS $\frac{1}{5}$

NOW YOUR TURN. FIND THE RECIPROCAL OF EACH NUMBER.

1. $\frac{2}{5}$ 2. $\frac{1}{7}$ 3. 9 4. $\frac{7}{8}$ 5. 3 6. $\frac{4}{11}$ 7. $\frac{1}{2}$
- $\frac{5}{2}$ 7 $\frac{1}{9}$ $\frac{8}{7}$ $\frac{1}{3}$ $\frac{11}{4}$ 2

MORE HELPFUL EXAMPLES

TO DIVIDE BY A FRACTION, SWITCH IT TO MULTIPLICATION AND TAKE THE RECIPROCAL OF THE FRACTION.

C. $\frac{1}{2} \div \frac{3}{4}$
 $= \frac{1}{2} \times \frac{4}{3}$
 $= \frac{4 \div 2}{6 \div 2} = \frac{2}{3}$

DO YOU SEE HOW THE DIVISION WAS CHANGED TO MULTIPLICATION AND THE FRACTION WAS FLIPPED?

D. $\frac{2}{3} \div 5 = \frac{2}{3} \div \frac{5}{1}$
 $= \frac{2}{3} \times \frac{1}{5}$
 $= \frac{2}{15}$

YOU **ONLY** TAKE THE RECIPROCAL OF THE FRACTION AFTER THE DIVISION SIGN.

NOW YOUR TURN. DIVIDE. DON'T FORGET TO SIMPLIFY.

8. $\frac{5}{6} \div \frac{1}{6}$
 $= \frac{5}{6} \times \frac{6}{1} = 5$

9. $\frac{1}{2} \div 7$
 $= \frac{1}{14}$

10. $\frac{3}{11} \div \frac{6}{11}$
 $= \frac{1}{2}$

11. $\frac{3}{4} \div \frac{2}{5}$
 $= 1\frac{7}{8}$

12. $3 \div \frac{2}{7}$
 $= 10\frac{1}{2}$

13. $\frac{5}{12} \div \frac{1}{5}$
 $= 2\frac{1}{12}$

14. $\frac{4}{9} \div 8$
 $= \frac{1}{18}$

15. $\frac{8}{11} \div \frac{2}{3}$
 $= 1\frac{1}{11}$

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

17. $\frac{6}{7} \div 12$
 $= \frac{1}{14}$

18. $\frac{4}{5} \div \frac{2}{10}$
 $= 4$

19. $\frac{7}{12} \div \frac{1}{9}$
 $= 5\frac{1}{4}$