

Dividing Whole Numbers by Fractions

To divide a whole number by a fraction, write the whole number as an improper fraction. Invert the divisor and multiply. Cancel if possible. Simplify.

Find: $6 \div \frac{2}{5}$

Write the whole number as an improper fraction.	Invert the divisor and multiply.	Cancel.	Multiply. Simplify.
$6 \div \frac{2}{5} = \frac{6}{1} \div \frac{2}{5}$	$\frac{6}{1} \times \frac{5}{2}$	$\frac{\overset{3}{\cancel{6}}}{1} \times \frac{5}{\underset{1}{\cancel{2}}}$	$\frac{3 \times 5}{1 \times 1} = \frac{15}{1} = 15$

Divide. Cancel when possible. Simplify.

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

$\frac{5}{1} \times \frac{5}{1} = \frac{5 \times 5}{1 \times 1} = \frac{25}{1} = 25$

$4 \div \frac{1}{4} =$

$9 \div \frac{1}{3} =$

$8 \div \frac{1}{2} =$

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

$12 \div \frac{3}{4} =$

$9 \div \frac{3}{5} =$

$16 \div \frac{2}{3} =$

3. $30 \div \frac{5}{6} =$

$\frac{\overset{6}{\cancel{30}}}{1} \times \frac{6}{\underset{1}{\cancel{5}}} = \frac{6 \times 6}{1 \times 1} = \frac{36}{1} = 36$

$18 \div \frac{3}{4} =$

$21 \div \frac{7}{9} =$

$40 \div \frac{5}{8} =$

4. $17 \div \frac{2}{3} =$

$21 \div \frac{6}{7} =$

$15 \div \frac{3}{7} =$

$24 \div \frac{4}{7} =$

5. $25 \div \frac{5}{7} =$

$50 \div \frac{5}{8} =$

$45 \div \frac{9}{10} =$

$36 \div \frac{3}{4} =$

6. $35 \div \frac{7}{9} =$

$40 \div \frac{8}{9} =$

$50 \div \frac{5}{12} =$

$28 \div \frac{4}{7} =$

7. $72 \div \frac{8}{9} =$

$63 \div \frac{9}{10} =$

$96 \div \frac{24}{25} =$

$100 \div \frac{25}{32} =$

Solve these word problems.

Do Your Work Here

8. The grocer bought a 12-pound carton of pepper. The pepper was in $\frac{1}{8}$ -pound cans. How many cans were in the carton? _____

9. For a gardening project, a 4-acre vacant plot of ground was divided into $\frac{1}{4}$ -acre plots. How many plots were made? _____