

Dividing with Mixed Numbers and Whole Numbers

To divide with mixed numbers and whole numbers, write the mixed numbers and whole numbers as improper fractions. Invert the divisor and multiply. Cancel when possible. Simplify if needed.

Find: $2\frac{5}{8} \div 3$

Write the mixed number and whole number as improper fractions.	Invert the divisor and multiply.	Cancel.	Multiply.
$2\frac{5}{8} \div 3 = \frac{21}{8} \div \frac{3}{1}$	$\frac{21}{8} \times \frac{1}{3}$	$\frac{\overset{7}{\cancel{21}}}{8} \times \frac{1}{\underset{1}{\cancel{3}}}$	$\frac{7 \times 1}{8 \times 1} = \frac{7}{8}$

Divide. Cancel if possible. Simplify.

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

$$\frac{7}{2} \div \frac{7}{1} = \frac{\cancel{7}}{2} \times \frac{1}{\cancel{7}} = \frac{1 \times 1}{2 \times 1} = \frac{1}{2}$$

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

$2\frac{3}{4} \div 11 =$

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

$$\frac{9}{2} \div \frac{3}{1} = \frac{\overset{3}{\cancel{9}}}{2} \times \frac{1}{\cancel{3}} = \frac{3 \times 1}{2 \times 1} = \frac{3}{2} = 1\frac{1}{2}$$

$4\frac{1}{8} \div 3 =$

$9\frac{1}{3} \div 7 =$

3. $3\frac{1}{7} \div 11 =$

$7\frac{1}{2} \div 3 =$

$1\frac{7}{8} \div 5 =$

4. $5 \div 3\frac{1}{3} =$

$$\frac{5}{1} \div \frac{10}{3} = \frac{\cancel{5}}{1} \times \frac{3}{\cancel{10}} = \frac{1 \times 3}{1 \times 2} = \frac{3}{2} = 1\frac{1}{2}$$

$13 \div 5\frac{4}{7} =$

$8 \div 5\frac{1}{3} =$

5. $2 \div 6\frac{2}{3} =$

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

$5 \div 4\frac{1}{6} =$

6. $3\frac{3}{4} \div 12 =$

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

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

7. $14 \div 3\frac{1}{9} =$

$4\frac{2}{5} \div 2 =$

$2 \div 7\frac{1}{3} =$

8. $11 \div 8\frac{1}{4} =$

$2\frac{1}{4} \div 6 =$

$4 \div 3\frac{1}{5} =$

9. $3\frac{1}{2} \div 5 =$

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

$6\frac{2}{3} \div 10 =$

10. $11 \div 4\frac{1}{8} =$

$5\frac{1}{3} \div 24 =$

$39 \div 8\frac{2}{3} =$