



HOW TO DIVIDE WHOLE NUMBERS BY FRACTIONS

Before you tackle this, you need to know about multiplying fractions.

Frazer says "To divide a whole numbers (integers) by a fraction follow these 4 easy steps."

Step 1

- Change the integer, or whole number, into a fraction by putting it over a denominator of 1.
- Convert any mixed fractions into *improper* fractions.

Step 2

- Swap the numerator and denominator the the dividend fraction, and then change the operation to x instead of \div .

Step 3

- Multiply the numerators of the fractions together, and the denominators of the fractions together.

Step 4

- Simplify your answer.

$$\text{Example 1} \quad 6 \div \frac{3}{4} = \frac{6}{1} \div \frac{3}{4} = \frac{6}{1} \times \frac{4}{3} = \frac{24}{3} = 8$$

$$\text{Example 2} \quad 4 \div \frac{5}{9} = \frac{4}{1} \div \frac{5}{9} = \frac{4}{1} \times \frac{9}{5} = \frac{36}{5} = 7 \frac{1}{5}$$

$$\text{Example 3} \quad 10 \div 2 \frac{2}{3} = \frac{10}{1} \div \frac{8}{3} = \frac{10}{1} \times \frac{3}{8} = \frac{30}{8} = \frac{15}{4}$$

$$\text{Example 4} \quad 3 \div 1 \frac{4}{5} = \frac{3}{1} \div \frac{9}{5} = \frac{3}{1} \times \frac{5}{9} = \frac{15}{9} = \frac{5}{3}$$

