

Multiplying Fractions and Whole Numbers

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A whole # can be written as a fraction by placing the whole # over 1

$$\text{EX. } 4 = \frac{4}{1} \quad 13 = \frac{13}{1}$$

Steps

1. Write problem horizontally
2. Write any whole #'s as fractions
3. Cross Cancel if possible
* simplify diagonally
4. Multiply straight across (numerator X numerator AND denominator X denominator)
5. Simplify if possible (and no improper fractions)

$$\text{EX. } 5 \times \frac{1}{8} = \frac{5}{1} \times \frac{1}{8} = \boxed{\frac{5}{8}}$$

$$\text{EX. } 3 \times \frac{1}{9} = \frac{\cancel{3}^1}{1} \times \frac{1}{\cancel{9}_3} = \boxed{\frac{1}{3}}$$

$$\text{EX. } \frac{3}{4} \times 36 = \frac{3}{\cancel{4}_1} \times \frac{\cancel{36}^9}{1} = \frac{27}{1} = \boxed{27}$$

EX. Evaluate $6x$ for $x = \frac{1}{8}$.

$$6x = \frac{\cancel{6}^3}{1} \times \frac{1}{\cancel{8}_4} = \boxed{\frac{3}{4}}$$

EX. Evaluate $6x$ for $x = \frac{2}{3}$.

$$6x = \frac{\cancel{6}^2}{1} \times \frac{2}{\cancel{3}_1} = \frac{4}{1} = \boxed{4}$$