

Clearing Decimals

I. Base 10

A. Decimal Place Value

ex: $0.\overset{\text{tenths}}{\underbrace{3}} \times 10 = 3$

ex: $0.\overset{\text{hundredths}}{\underbrace{54}} \times 100 = 54$

ex: $4.\overset{\text{thousandths}}{\underbrace{791}} \times 1,000 = 4,791$

II. Equations w/ Decimals

ex: ^{tenths}₍₁₀₎ $0.8x + 1.6 = 5$ ^{ones}₍₁₀₎

$$\begin{array}{r}
 8x + 16 = 50 \\
 - 16 \quad - 16 \\
 \hline
 8x = 34 \div 2 \text{ simplify} \\
 \hline
 8 \div 2 \\
 \hline
 x = \frac{17}{4}
 \end{array}$$

10 or 100 bigger #

ex: ^{tenths}₍₁₀₀₎ $0.9x + 1.13 = 5.40$ ^{tenths}₍₁₀₀₎

$$\begin{array}{r}
 90x + 113 = 540 \\
 - 113 \quad - 113 \\
 \hline
 90x = 427 \\
 \hline
 \frac{90x}{90} = \frac{427}{90}
 \end{array}$$

• Can only multiply by one #

$$x = \frac{427}{90}$$