

Algebra Quiz

1. Solve each equation for x

a) $x - 9 = 2$

$x = 2 + 9$

$x = 11$

b) $2x - 4 = -12$

$2x = -12 + 4$

$\frac{2x}{2} = \frac{-8}{2}$

$x = -4$

c) $3(x - 5) = 2(x - 8)$

$3x - 15 = 2x - 16$

$3x - 2x = -16 + 15$

$x = -1$

d) $3(x - 1) - 1(2 + x) = 1$

$3x - 3 - 2 - 1x = 1$

$2x - 5 = 1$

$2x = 1 + 5$

$\frac{2x}{2} = \frac{6}{2}$

$x = 3$

e) $\frac{-3}{x} = \frac{4}{-12}$

$\frac{4x}{4} = \frac{36}{4}$

$x = 9$

f) $\frac{12x}{4} - \frac{12x}{6} = \frac{12}{6}$

$3x - 2x = 2$

$x = 2$

$\frac{x}{4} - \frac{x}{6} = \frac{1}{6}$

$\frac{3x}{12} - \frac{2x}{12} = \frac{1}{6}$

$\frac{x}{12} = \frac{1}{6}$

$\frac{6x}{6} = \frac{12}{6}$

$x = 2$