

Section 2.1 Focus Exercises

1. Determine if the **replacement value** shown (after each equation) is a solution of that equation.

a) $3p - 2 = 6$; $p = 3$

b) $9 - 3k = 7k - 11$; $k = 2$

c) $5m + (4 - m) = 3(m - 2) - 2$; $m = -4$

d) $\frac{1}{6}x - \frac{1}{3}x = \frac{x-6}{3}$; $x = 12$

2. Solve each equation by isolating the variable. SHOW ALL STEPS!

a) $p + 2 = 4$

b) $x - 8 = 9$

c) $y - 9 = -6$

d) $b + 1 = -5$

e) $r - 4 = -4$

f) $w + 3 = 3$

g) $m - \frac{5}{6} = \frac{9}{6}$

h) $k + \frac{9}{12} = \frac{3}{12}$

i) $y + 2 = -8$

j) $c - 1 = -6$

3. Solve each equation by isolating the variable. SHOW ALL STEPS!

a) $7x = 56$

b) $9m = -63$

c) $-6x = 24$

d) $-12p = -36$

e) $10x = 15$

f) $5m = -9$

g) $\frac{7}{3}x = 28$

h) $\frac{3}{2}y = -30$

i) $\frac{4}{7}n = -2$

j) $\frac{5}{8}v = \frac{15}{4}$

k) $\frac{y}{9} = 2$

l) $\frac{7n}{8} = -1$

m) $-6m = 4$

n) $-8x = -18$

o) $\frac{-6}{7}x = -12$

p) $\frac{-5}{4}k = \frac{15}{2}$