

Algebra I Worksheet #4 Unit 4 selected solutions

Solve each equation for the indicated variable.

4. $a(bx - c) = 4(x - d)$ solve for x

$$abx - ac = 4x - 4d$$

$$abx - 4x = ac - 4d$$

$$(ab - 4)x = ac - 4d$$

$$x = \frac{ac - 4d}{ab - 4}$$

8. $a = mv + mz$ solve for m

$$mv + mz = a$$

$$(v + z)m = a$$

$$m = \frac{a}{v + z}$$

14. $x(y + z) - 2(y - z) = 1$ solve for y

$$xy + xz - 2y + 2z = 1$$

$$xy - 2y = 1 - xz - 2z$$

$$(x - 2)y = 1 - xz - 2z$$

$$y = \frac{1 - xz - 2z}{x - 2}$$

19. $2(kx + 4d) = 3(tx - c)$ solve for x

$$2kx + 8d = 3tx - 3c$$

$$2kx - 3tx = -3c - 8d$$

$$(2k - 3t)x = -3c - 8d$$

$$x = \frac{-3c - 8d}{2k - 3t}$$