

Solve each equation or formula for the variable indicated.

1. $x = b - cd$, for c

2. $10m - p = -n$, for m

3. $\frac{5}{9}v + w = z$, for v

4. $\frac{df + 10}{6} = g$, for f

5. $18t + 11v = w - 13t$, for t

6. $10c - f = -13 + cd$, for c

7. Acceleration is the measure of how fast a velocity is changing. The formula for acceleration is $a = \frac{v_f - v_i}{t}$, where a represents the acceleration rate, v_f is the final velocity, v_i is the initial velocity, and t represents the time in seconds.

a) Solve the formula for v_f .

b) What is the final velocity of a runner who is accelerating to $2 \frac{ft}{sec^2}$ for 3 seconds with the initial velocity of $4 \frac{ft}{sec^2}$.