Solving Multi Step Equations

Solve each equation.

1) $-24 = -4(5 - 4q) - 6(q - 6)$

2) $\dfrac{4}{3(k - 1)} = \dfrac{3}{5(4k + 3)}$

3) $6 = 5 - 2(u + 4) + 4(2u - 3)$

4) $\dfrac{2t - 5}{3} + 2(t + 6) = 4 - 3t$

5) $\dfrac{5(3 - c)}{2} - 7 + c = 3(c + 2)$

6) $4x - 3 + 6(1 - x) = 9 - (x - 2) - 3x$

7) $-6(2a - 9) = -36$

8) $\dfrac{3}{5(v - 3)} = \dfrac{1}{4(1 - v)}$

Solving Multi Step Equations

Answer key

Solve each equation.

1) $-24 = -4(5 - 4q) - 6(q - 6)$

q = –4

2) $\dfrac{4}{3(k - 1)} = \dfrac{3}{5(4k + 3)}$

k = $-\dfrac{69}{71}$

3) $6 = 5 - 2(u + 4) + 4(2u - 3)$

u = $3\dfrac{1}{2}$

4) $\dfrac{2t - 5}{3} + 2(t + 6) = 4 - 3t$

t = $-1\dfrac{2}{17}$

5) $\dfrac{5(3 - c)}{2} - 7 + c = 3(c + 2)$

c = $-1\dfrac{2}{9}$

6) $4x - 3 + 6(1 - x) = 9 - (x - 2) - 3x$

x = 4

7) $-6(2a - 9) = -36$

a = $7\dfrac{1}{2}$

8) $\dfrac{3}{5(v - 3)} = \dfrac{1}{4(1 - v)}$

v = $1\dfrac{10}{17}$