

1.2 Multi-Step Equations (Types of solutions)

Solve each equation.

1) $-5 + n + 5 - 5n = -8n + 4n$

2) $-5 + 4x = x - 8 + 3x$

3) $-7 - x = -8x$

4) $1 - 2r = -4r + 13$

5) $-6(k - 1) = -6k + 6$

6) $-7(2 + 2x) = 14 - 7x$

7) $5(-8n - 3) = 2n + 27$

8) $-5(-n + 7) + 3n = -31 + 8n$

9) $-6 + 15b = -3b + 6(-1 + 3b)$

10) $3(7n + 6) = -4(8 + n)$

11) $-6 - 2(1 - 7x) = -4 - 5(-3x - 1)$

12) $-5(x + 4) + 6 = -5(x - 1)$

13) Pranav drove to his friend's house and back. The trip there took six hours and the trip back took four hours. He averaged 20 mph faster on the return trip than on the outbound trip. What was Pranav's average speed on the outbound trip?

14) A submarine traveled to Tahiti and back. It took three hours longer to go there than it did to come back. The average speed on the trip there was 6 km/h. The average speed on the way back was 9 km/h. How many hours did the trip there take?