Lesson 1.5 Practice: Algebraic Proof and the Two-Column Format

School Launch · Geometry · Unit 1: Foundations: Logic and the Axiomatic Method · Worksheet A

Calculator allowed

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Solve $2(x + 9) = 0$ and give a reason for every step (two-column style). EASY

2. Solve $2(x + 9) = 6$ and give a reason for every step (two-column style). EASY

3. Solve $3(x + 6) = 6$ and give a reason for every step (two-column style). EASY

4. Solve $6(x + 5) = 7x + 34$ and give a reason for every step (two-column style). MEDIUM

5. Solve $3(x + 7) = 4x + 18$ and give a reason for every step (two-column style). MEDIUM

6. Solve $3(x - 8) = 4x - 17$ and give a reason for every step (two-column style). MEDIUM

7. Solve $3(x + 2) = 4x + 1$ and give a reason for every step (two-column style). MEDIUM

8. Solve $\frac{5x - 9}{-5} = \frac{4}{5}$ and give a reason for every step (two-column style). HARD

9. Solve $\frac{4x + 6}{4} = \frac{5}{2}$ and give a reason for every step (two-column style). HARD

10. Solve $\frac{5x + 7}{4} = -\frac{3}{4}$ and give a reason for every step (two-column style). HARD