

Chapter 3 — Solving One-Step Equations

Worksheet C: Mixed Application

Name: _____ Grade: _____ Date: _____

1. A person has \$64 after spending \$18. Write and solve an equation for the amount of money the person had before spending.

2. A temperature of T degrees Celsius decreases by 9°C and becomes -4°C . Write and solve an equation for T .

3. A delivery driver travels the same distance each day for 7 days and travels 154 km in total. Write and solve an equation for the distance travelled each day.

4. A student says $r-8=20$ can be solved by subtracting 8 from both sides. Explain why this does not undo the operation attached to r . Then solve correctly.

5. A student earns the same number of points in each of 5 rounds and earns 65 points total. Write and solve an equation for the number of points earned each round.

6. A number divided by -6 equals 4. Write and solve an equation.

7. Solve and check: $x-13=21$

8. Solve and check: $-9m = -72$

9. Solve and check: $n \div (-4) = 9$

10. Solve and check: $p + (-15) = -2$

11. Solve and check: $(-q) \div 6 = 5$

12. A movie theatre sells 9 identical tickets for \$117. Write and solve an equation for the cost of one ticket.

13. A student says $s \div (-3) = -7$ has solution $s = -21$. Is the student correct? Explain and check.

14. Non-Routine: A student solves $-5x = 35$ and writes $x = -7$. Another student says the answer must be positive because 35 is positive. Who is correct? Use a check in the original equation to explain.

15. Non-Routine: A student says that $-4n = 28$ has solution $n = 7$. The student explains, "I divided 28 by 4." Is the student correct? Identify the missing sign, solve the equation, and check the correct solution in the original equation.
