

Unit 9: Putting It All Together

PRACTICE

Name: _____ Date: _____

Solve each problem and give the exact answer. Show your work on scratch paper; write only the final answer.

1. Solve for x : $5x - 8 = 3x + 14$

Answer: _____

2. Solve for x : $4(x + 3) = 2x - 6$

Answer: _____

3. A right triangle has legs of length 6 and 8. Find the length of the hypotenuse.

Answer: _____

4. A right triangle has a hypotenuse of 13 and one leg of 5. Find the length of the other leg.

Answer: _____

5. Evaluate: $2^5 \times 2^3$ (write your answer as a single power, base 2). Give the exponent only.

Answer: _____

6. Simplify and evaluate: $(3^4) / (3^2)$

Answer: _____

7. The function is $y = 4x - 7$. Find y when $x = 5$.

Answer: _____

8. A linear function passes through (0, 3) and has a slope of 2. Find its value (y) when $x = 6$.

Answer: _____

9. Evaluate: $5^0 + 2^3$

Answer: _____

10. Solve for x : $(x/3) + 4 = 10$

Answer: _____

11. Find the distance between the points (1, 2) and (4, 6) using the Pythagorean Theorem.

Answer: _____

12. Write 7^{-2} as a fraction.

Answer: _____