

Unit 9: Putting It All Together

PRACTICE · SET 2

Name: _____ Date: _____

Solve each problem and write your exact answer in simplest form. Show your work on scratch paper.

1. Solve for x : $4x - 7 = 2x + 11$

Answer: _____

2. A function is defined by $f(x) = 3x - 5$. Find $f(6)$.

Answer: _____

3. Evaluate: $2^5 \times 2^3$. Write your answer as a single number.

Answer: _____

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

Answer: _____

5. Simplify and write as a single power with a positive exponent: $5^7 / 5^4$. Give the numerical value.

Answer: _____

6. Solve for x : $3(x + 4) = 27$

Answer: _____

7. The points (2, 3) and (2, 9) are two vertices. Find the distance between them.

Answer: _____

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

Answer: _____

9. Evaluate: $3^4 - 2^3$

Answer: _____

10. A linear function passes through (0, 4) and has a slope of 3. Write its value $f(x)$ when $x = 5$. Give the number.

Answer: _____

11. Solve for x : $(x/2) + 6 = 10$

Answer: _____

12. Evaluate: $\sqrt{144} + 4^2$

Answer: _____