

Factor the Special Products 3

Perfect Square Trinomials and Difference of Squares

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Factor the perfect square trinomial completely.

1)  $z^2 + 14z + 49$

1) \_\_\_\_\_

2)  $z^2 + 2z + 1$

2) \_\_\_\_\_

3)  $z^2 + 12z + 36$

3) \_\_\_\_\_

4)  $z^2 - 6z + 9$

4) \_\_\_\_\_

5)  $x^2 + 20x + 100$

5) \_\_\_\_\_

6)  $49x^2 + 84xy + 36y^2$

6) \_\_\_\_\_

7)  $9x^2 + 24x + 16$

7) \_\_\_\_\_

Factor the binomial completely.

8)  $z^2 - 100$

8) \_\_\_\_\_

9)  $121 - w^2$

9) \_\_\_\_\_

10)  $49x^2 - 25$

10) \_\_\_\_\_

11)  $x^2 - \frac{4}{9}$

11) \_\_\_\_\_

Answer Key

Testname: FACTORSPECIAL

1)  $(z + 7)^2$

2)  $(z + 1)^2$

3)  $(z + 6)^2$

4)  $(z - 3)^2$

5)  $(x + 10)^2$

6)  $(7x + 6y)^2$

7)  $(3x + 4)^2$

8)  $(z + 10)(z - 10)$

9)  $(11 - w)(11 + w)$

10)  $(7x + 5)(7x - 5)$

11)  $\left(x + \frac{2}{3}\right)\left(x - \frac{2}{3}\right)$