

Assignment 3.4

Multiply, write answers in standard form.

1. $(a + b)(a + b)$

2. $(a + b)(a - b)$

3. $(x - 3)(x^2 + 3x + 9)$

4. $(x - 5)(x^2 + 5x + 25)$

5. $(2x^2 - 3x + 8)(x + 6)$

6. $(a - b)(a^2 + ab + b^2)$

7. $(x + 2)^3$

8. $(x^2 - 5x + 14)(2x + 1)^2$

Refresh Your Memory

Use what you know about graph transformations to write how the graph will move compared to the parent function. List all transformations that apply.

9. $g(x) = x + 2$

10. $h(x) = x^2 - 2$

11. $m(x) = (x + 1)^2$

12. $n(x) = \sqrt{x - 3}$

13. $b(x) = -x$

14. $d(x) = 2x + 3$

15. $f(x) = \frac{1}{2}(x - 5)$

16. $k(x) = -2(x + 1)^2 - 3$

17. $t(x) = -|x| + 4$

18. $r(x) = -3\sqrt{x + 2} - 1$