

Homework

p.249: 8, 10, 16, 18, 34, 36, 51

GRAPHING WITH VERTEX FORM Graph the function. Label the vertex and axis of symmetry.

8. $y = 2(x + 1)^2 - 3$ 10. $y = -\frac{1}{4}(x + 2)^2 + 1$

GRAPHING WITH INTERCEPT FORM Graph the function. Label the vertex, axis of symmetry, and x-intercepts.

16. $f(x) = 2(x - 5)(x - 1)$ 18. $g(x) = -4(x + 3)(x + 7)$

MINIMUM OR MAXIMUM VALUES Find the minimum value or the maximum value of the function.

34. $g(x) = -4(x + 6)^2 - 12$ 36. $f(x) = 3(x + 10)(x - 8)$

51. **BIOLOGY** The function $y = -0.03(x - 14)^2 + 6$ models the jump of a red kangaroo where x is the horizontal distance (in feet) and y is the corresponding height (in feet). What is the kangaroo's maximum height? How long is the kangaroo's jump?

