

$$(1) \quad x^2 + 2x = 0$$

$$(2) \quad \frac{-b}{2a}$$

$$4 \quad \frac{16 + 32}{4} = 42$$

Vertex $(4, -16)$

$(4, -16)$

Graph C

Vertex $= (4, -16)$

axis of symmetry $= x = -5$

x intercept .

$$= x(x-8)$$

$$x = 0 \text{ or}$$

$$x = 8$$

x intercept $= 8$

smaller x value $(0, 0)$

larger x value $(8, 0)$

(3) The graph falls to the left.

(4) (A)

$$(10) y = x^6$$

$$(as) f(x) = (x-3)^6$$

= graph (A)

$$(b) f(x) = \frac{1}{7} x^6 \quad (D)$$

$$(c) (x+2)^6 - 4 \quad (D)$$

$$(d) \frac{1}{4} x^6 + 4 \quad (D)$$

$$(e) f(x) = \left(\frac{1}{4}x\right)^6 - 4 \quad (B)$$

$$(f) (2x)^6 - 1 \quad (D)$$