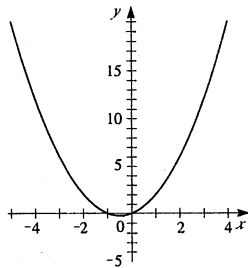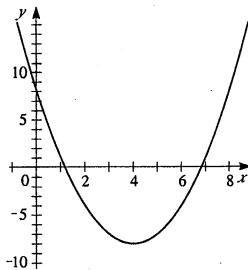16. $f(x) = x + x^2 = \left(x^2 + x + \frac{1}{4}\right) - \frac{1}{4} = \left(x + \frac{1}{2}\right)^2 - \frac{1}{4}$.

Therefore, the minimum value is $f\left(-\frac{1}{2}\right) = -\frac{1}{4}$.

18. $f(x) = x^2 - 8x + 8 = (x^2 - 8x + 16) + 8 - 16 = (x - 4)^2 - 8$.

Therefore, the minimum value is $f(4) = -8$.

20. $f(x) = 1 - 6x - x^2 = -(x^2 + 6x) + 1 = -(x^2 + 6x + 9) + 1 + 9$
$= -(x + 3)^2 + 10$.

Therefore, the maximum value is $f(-3) = 10$.