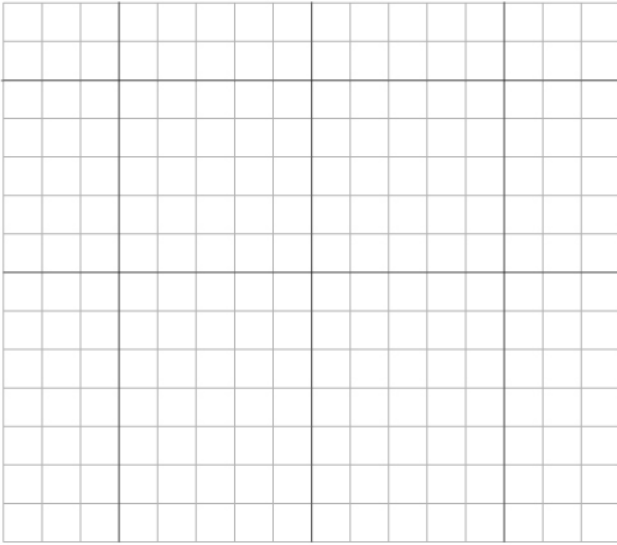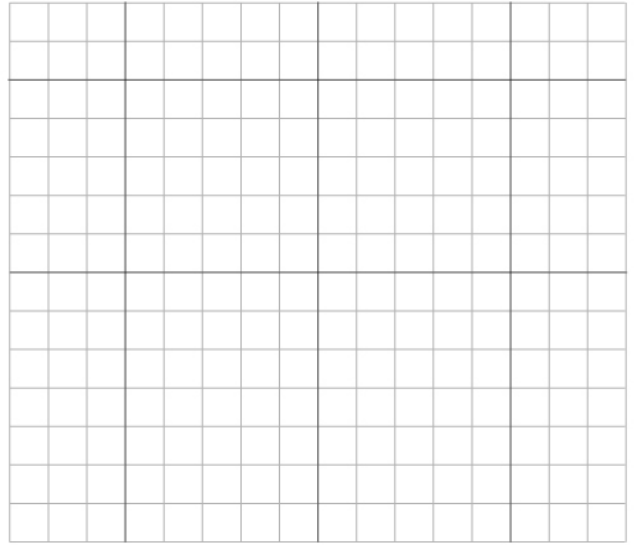# Quadratic Functions and Transformations

Draw the graph of each function and also translate the graph as directed.
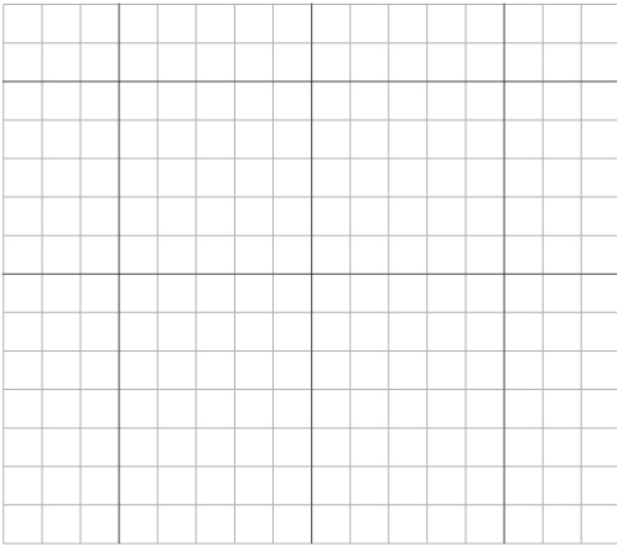
a $f(x) = -x^2 - 4x + 5$, translate 2 units up
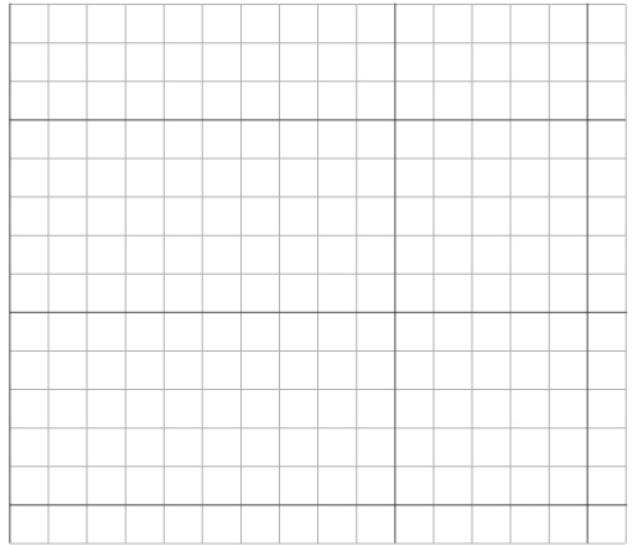
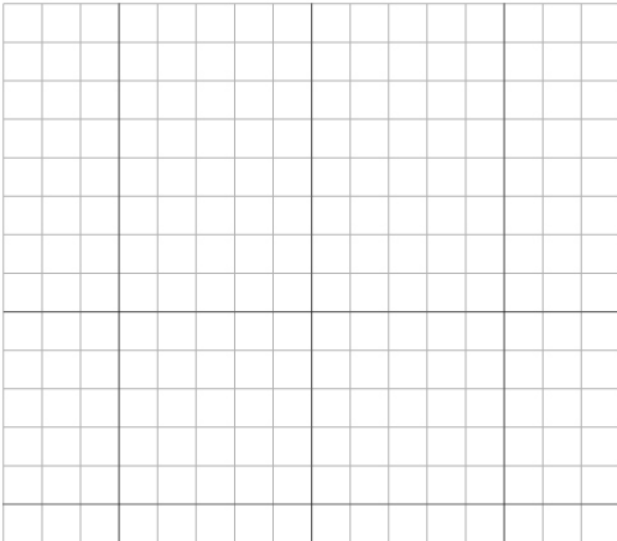**b** $f(x) = x^2 + 6x + 9$, translate 3 units right

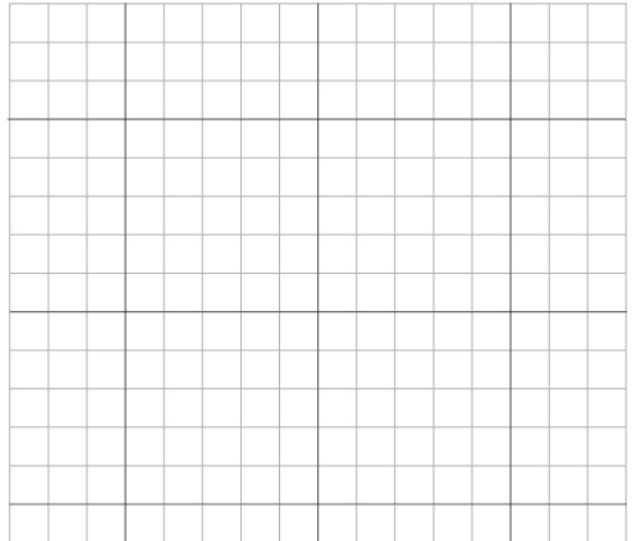**c** $f(x) = 2x^2 + 3$, translate 3 units down

d $f(x) = -x^2 + 4x - 5$, translate 5 units left
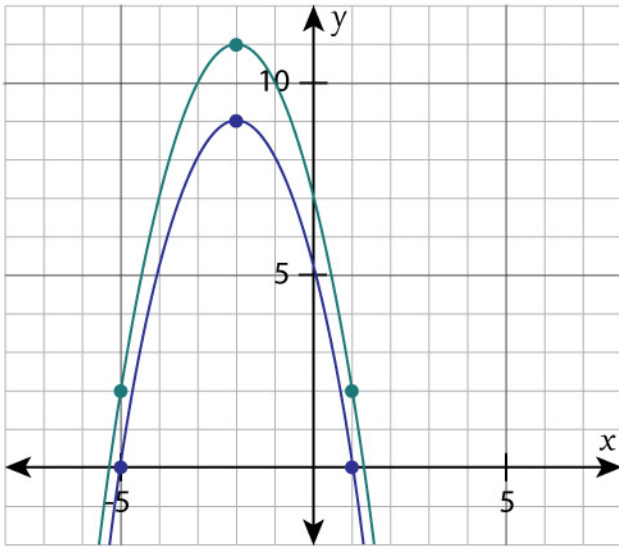
e $f(x) = 3x^2 - 9$, translate 9 units up

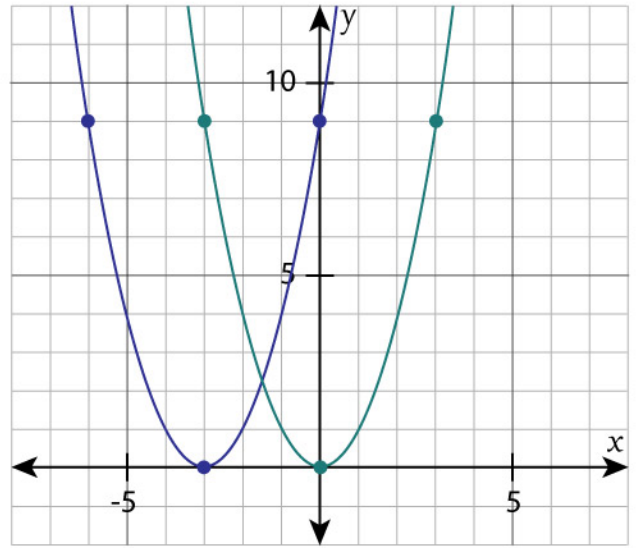**f** $f(x) = x^2 + 8x + 6$, translate 2 units right
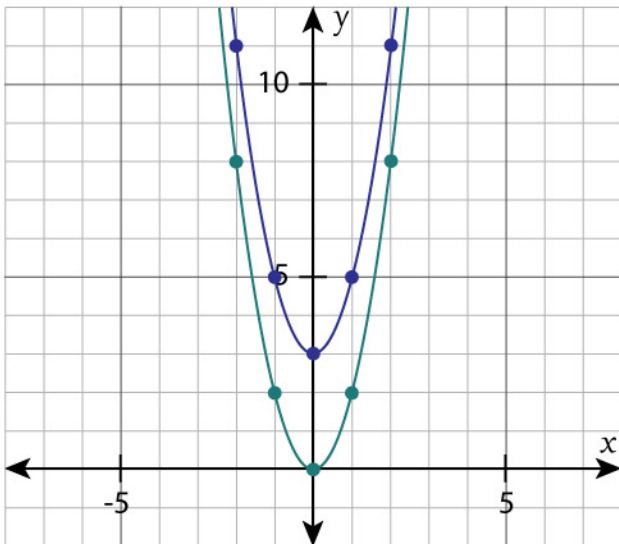
Quadratic Functions and Transformations

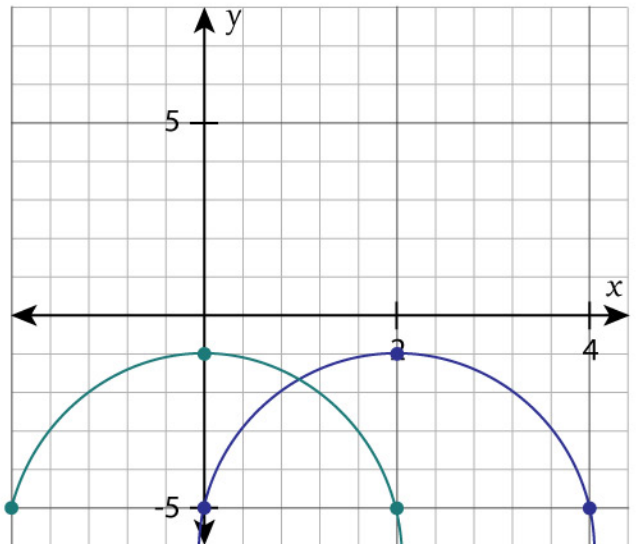Answers

a) $f(x) = -x^2 - 4x + 5$, translate 2 units up

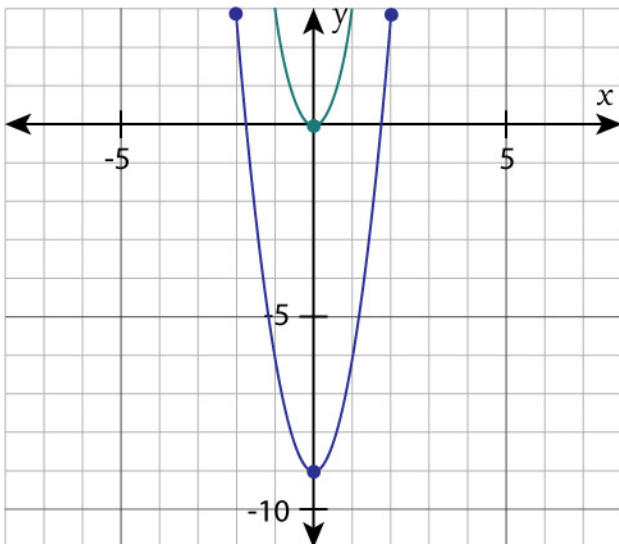**b)** $f(x) = x^2 + 6x + 9$, translate 3 units right

c) $f(x) = 2x^2 + 3$, translate 3 units down

d) $f(x) = -x^2 + 4x - 5$, translate 5 units left

e) $f(x) = 3x^2 - 9$, translate 9 units up

f) $f(x) = x^2 + 8x + 6$, translate 2 units right