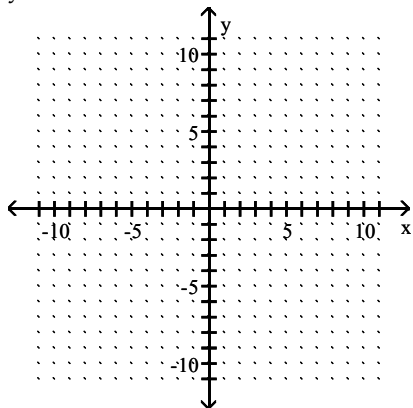


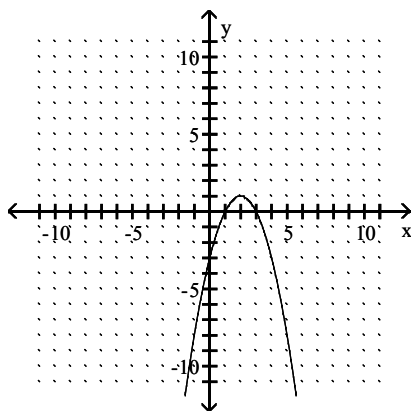
Chapter 7 Section 3 Part B Worksheet

Graph the parabola whose equation is given.

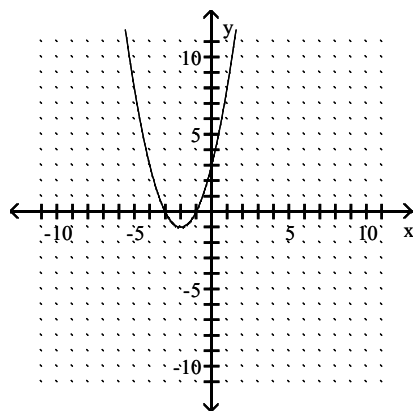
1) $y = x^2 + 4x + 3$



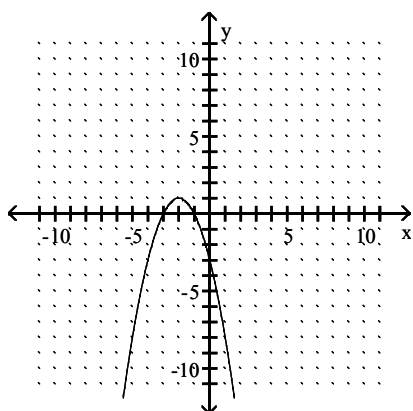
A)



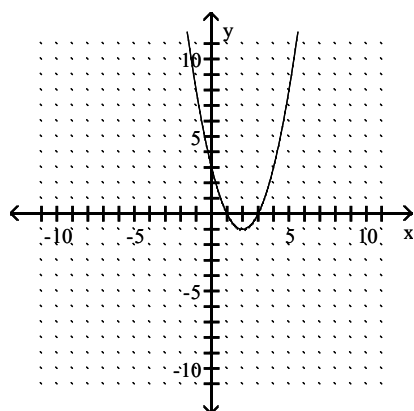
B)



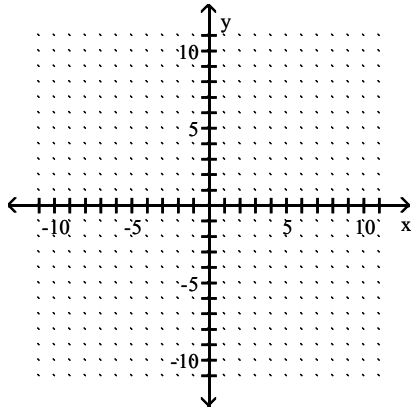
C)



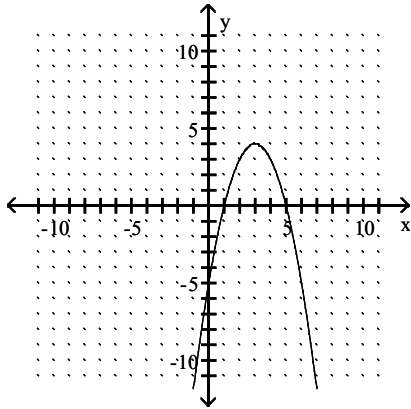
D)



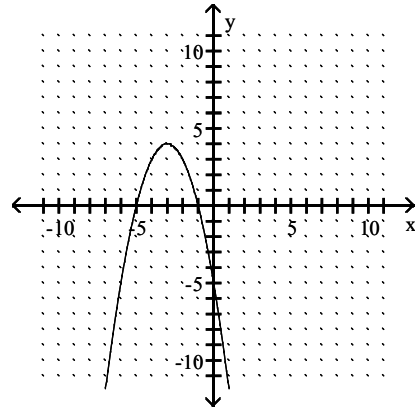
2) $y = -x^2 - 6x - 5$



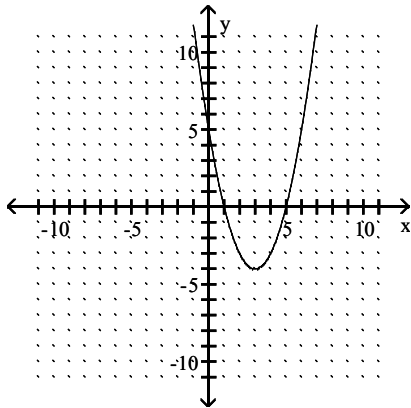
A)



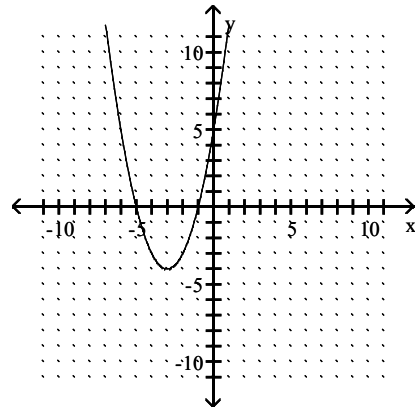
B)



C)

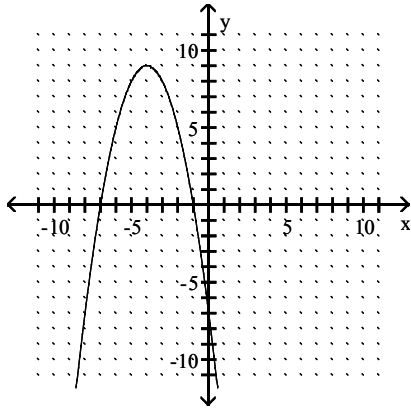


D)

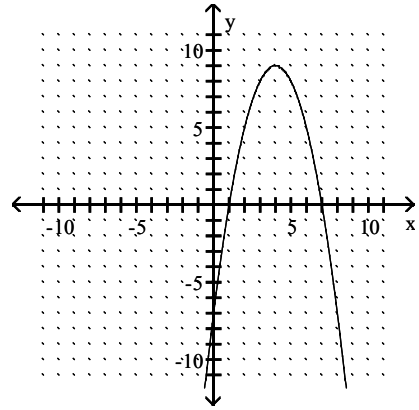


3) $y = x^2 - 8x + 7$

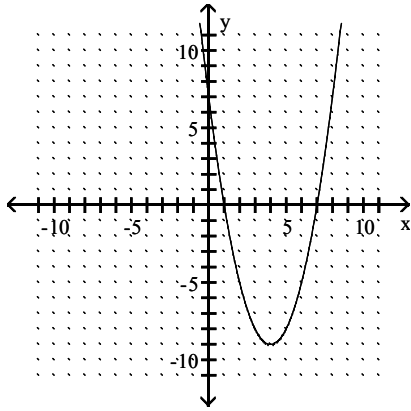
A)



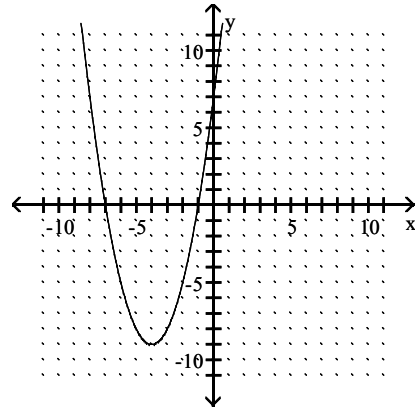
B)



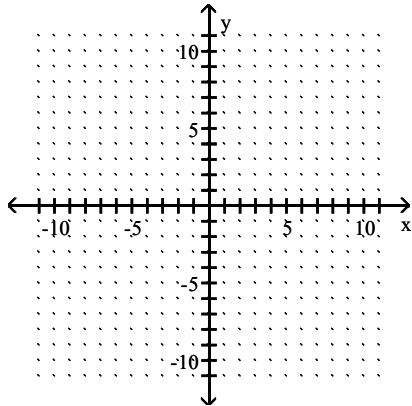
C)



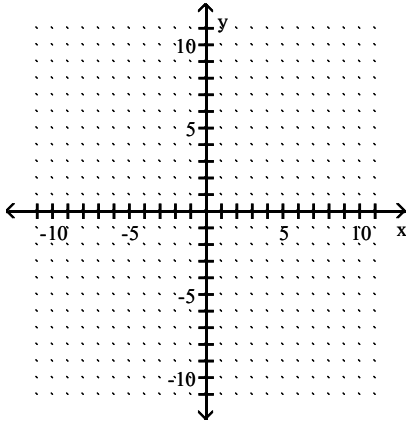
D)



4) $y = 3x^2 + 30x + 72$



5) $f(x) = x^2 - 4$



Solve the problem.

- 6) Fireworks are launched into the air. The quadratic function $y = -10x^2 + 183x + 7$ models the fireworks' height, y , in feet, x seconds after they are launched. When should the fireworks explode so that they go off at the greatest height? What is that height? (Round answers the nearest hundredth.)
- 7) The quadratic function $y = 0.0036x^2 - 0.46x + 36.31$ models the median, or average, age, y , at which U.S. men were first married x years after 1900. In which year was this average age at a minimum? (Round to the nearest year.) What was the average age at first marriage for that year? (Round to the nearest tenth.)