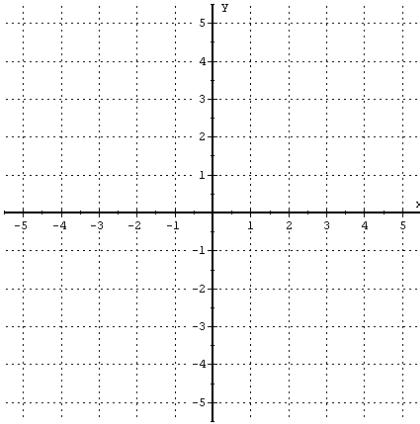
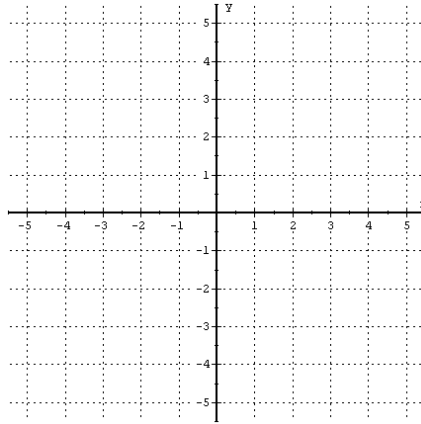


# Transformation Worksheet I

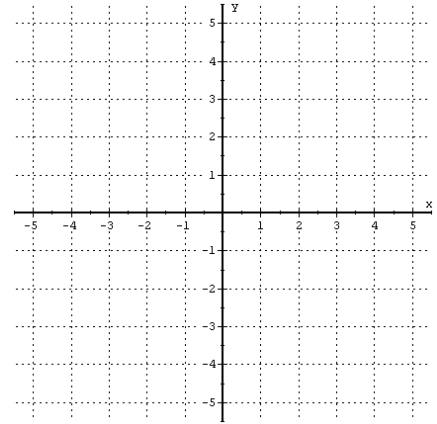
Sketch the graphs of the following transformed parabolas. Use your knowledge of vertices (minimum and maximum), x-intercepts, y-intercept, translations, reflections, etc. to make an accurate sketch.



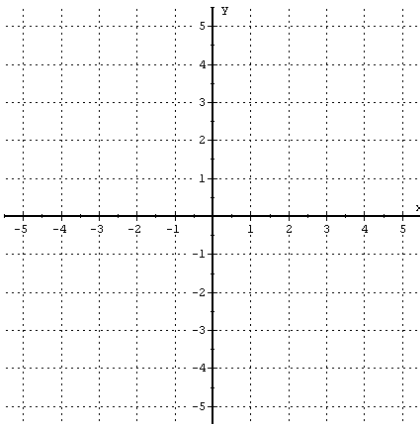
1)  $y = x^2$



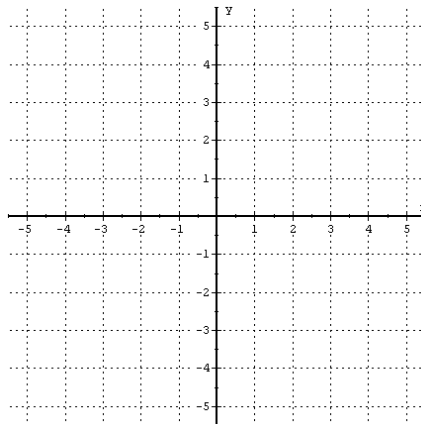
2)  $y = x^2 - 4$



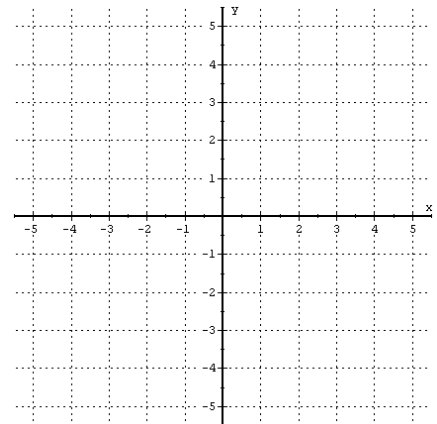
3)  $y = (x - 4)^2$



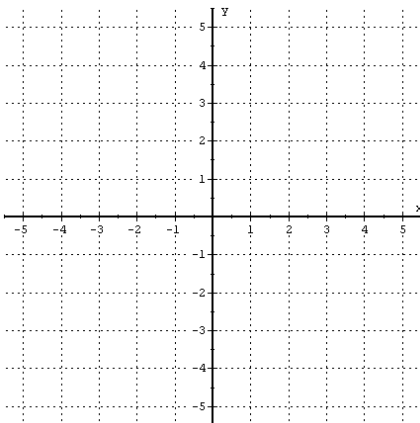
4)  $y = (x + 3)^2$



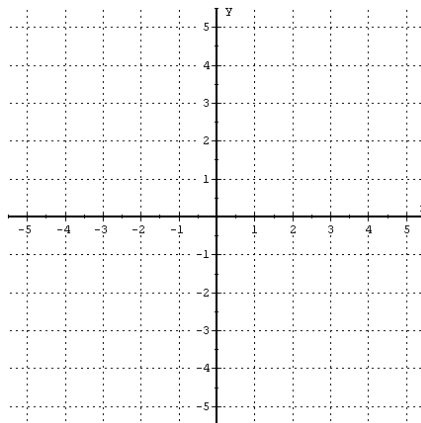
5)  $y = (x + 2)^2 - 3$



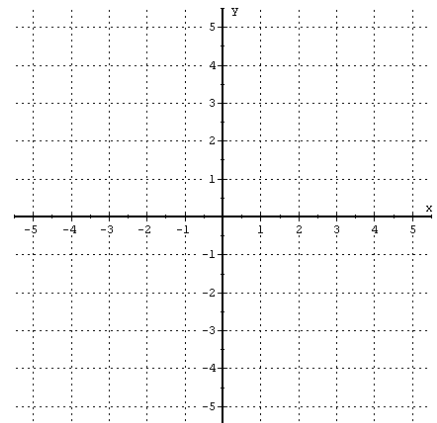
6)  $y = 3x^2$



7)  $y = 2(x - 1)^2$



8)  $y = -3(x + 3)^2 + 4$



9)  $y = \frac{1}{2}(x - 2)^2 - 5$