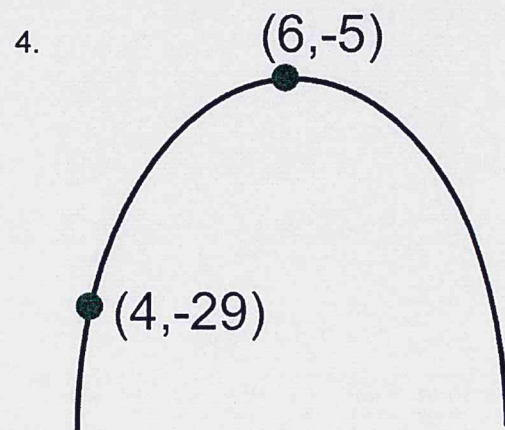
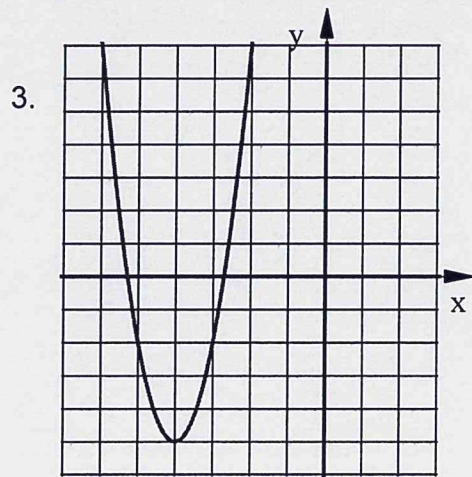


Use a separate piece of graph paper to graph each parabola using at least five points.

1. $y = -4(x - 3)^2 + 7$

2. $y = \frac{1}{4}(x + 2)^2 - 8$

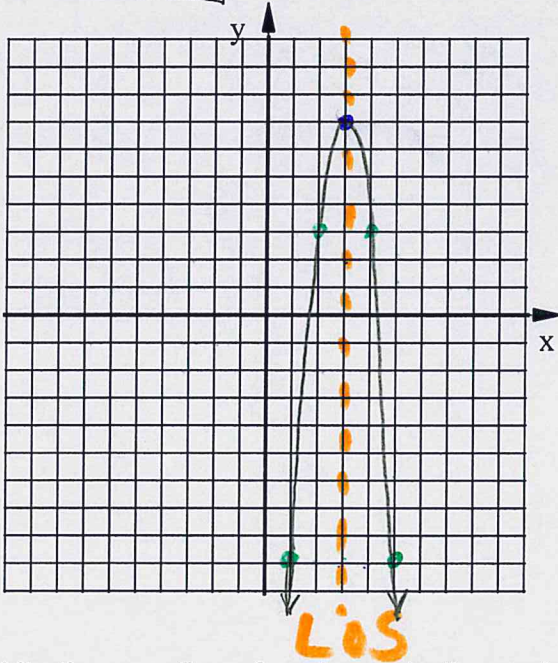
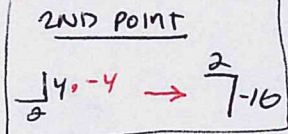
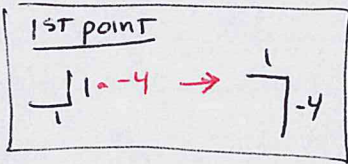
Write the equation of each quadratic graph in Vertex Form.



Use a separate piece of graph paper to graph each parabola using at least five points.

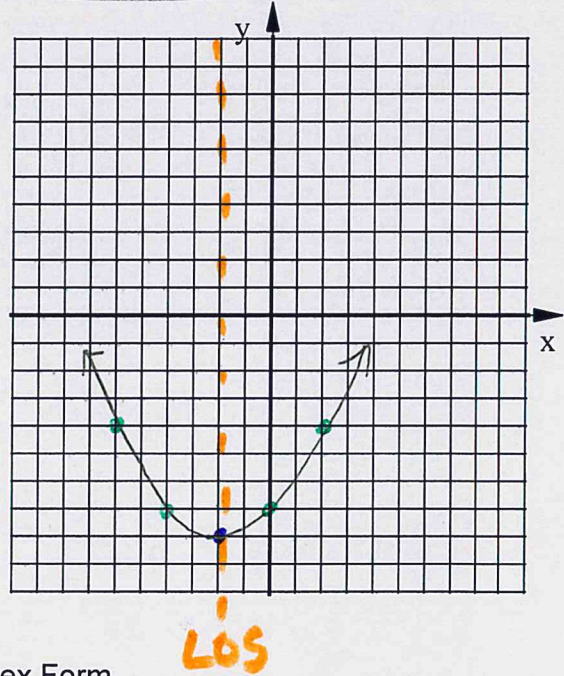
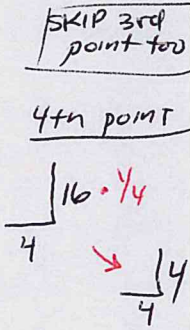
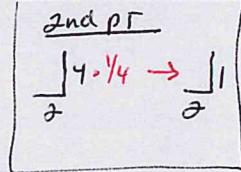
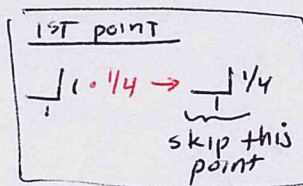
1. $y = -4(x-3)^2 + 7$
 3 RT 7 up
 Vertex (3,7)

4 TIMES TALLER & OPENS DOWN

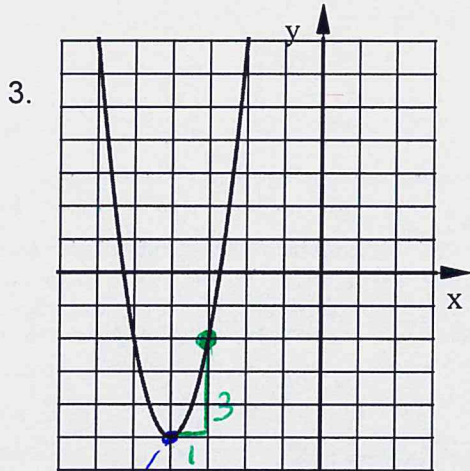


2. $y = \frac{1}{4}(x+2)^2 - 8$
 2 left 8 down
 Vertex (-2, -8)

one-fourth as tall & opens up



Write the equation of each quadratic graph in Vertex Form.



Vertex (-4, -5)
 h k

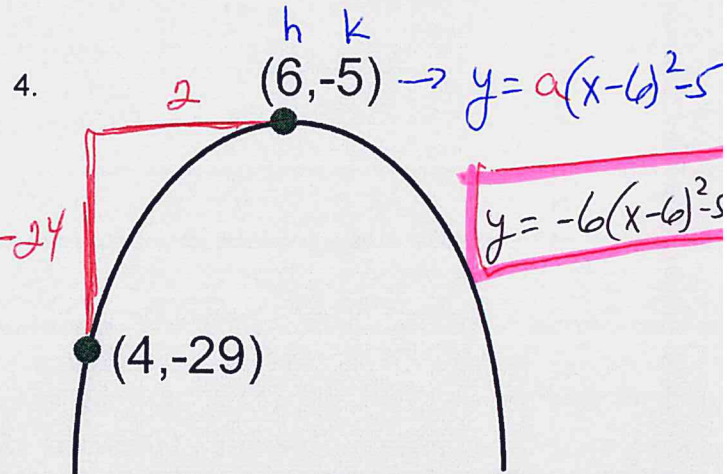
$y = a(x+4)^2 - 5$

on this graph on parent function



this graph 3 times taller → a=3

$y = 3(x+4)^2 - 5$



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

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

this graph parent function



$a = \frac{-24}{4} = -6$