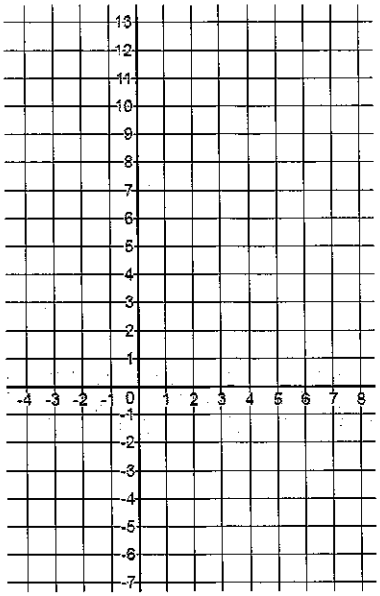
8.1 Practice

Graph the parabolas by completing the table

1. Graph $y = 2x^2 - 1$

x	$y = 2x^2 - 1$	Coordinate:
-2		(,)
-1		(,)
0		(,)
1		(,)
2		(,)



Is the parabola upward or downward facing?

Where is the vertex?

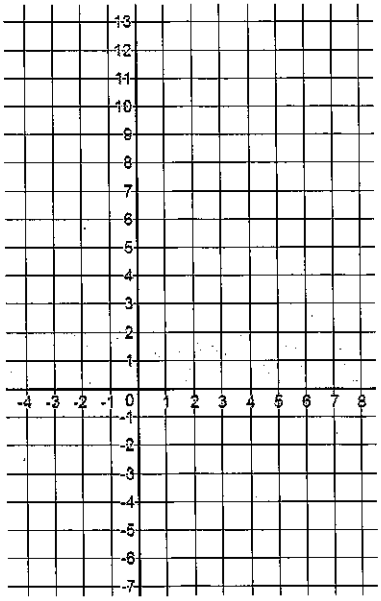
Is the vertex a minimum or a maximum?

How does the "2" in the original equation affect the graph?

How does the "-1" in the original equation seem to affect the graph?

2. Graph $y = -(x - 3)^2$

x	$y = -(x - 3)^2$	Coordinate:
1		(,)
2		(,)
3		(,)
4		(,)
5		(,)



Is the parabola upward or downward facing?

Where is the vertex?

Is the vertex a minimum or a maximum?

How does the negative in front of the parentheses in the original equation affect the graph?

How does the "-3" in the original equation seem to affect the graph?