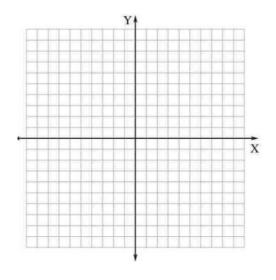
Graphing Quadratics – Standard Form

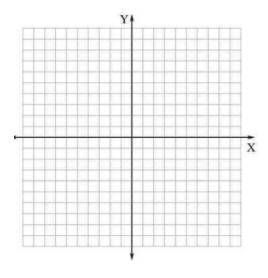
| Quadratic Form: | | |
|--|-----------|--|
| 'a' makes the graph, neg. 'a' opens | | and pos. 'a' opens |
| Squared makes it graph as | named a _ | function. |
| 'c' the graph a number of units. | | |
| 'A of S' means | · | Steps to Graph a Quadratic in Std Form |
| To find the vertex you must use the formula: | | Find Use "x" and plug in to quadratic to find |
| Which is now the x in the vertex (x,y) . | | 3. Plot both4. Choose two x-values to use to find |
| To find the y-intercept we find the value of | | 5. Plot |
| Ex1. $y = x^2 + 6x + 6$ | | |

| Vertex | |
|---------------|--|
| Max/Min Value | |
| AOS | |
| Zero(s) | |
| Opens | |
| y-intercept | |
| Domain | |
| Range | |



Ex. 2)
$$y = 2x^2 - 12x + 17$$

| Vertex | |
|---------------|--|
| Max/Min Value | |
| AOS | |
| Zero(s) | |
| Opens | |
| y-intercept | |
| Domain | |
| Range | |



Ex 3)
$$y = \frac{1}{2}x^2 - 2x + 6$$

| Vertex | |
|---------------|--|
| Max/Min Value | |
| AOS | |
| Zero(s) | |
| Opens | |
| y-intercept | |
| Domain | |
| Range | |

