## Foundations of Math 11

In Class Exercise...Quadratics Review

1. Complete the chart shown for the quadratic: $\quad y=-5(x+3)^{2}+8$

| Direction of Opening |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: |
| Vertex |  |  |  |  |
| $y$-intercept |  |  |  |  |
| Domain |  |  |  |  |
| Range |  |  |  |  |
| Equation for Axis of Symmetry |  |  |  |  |
| Maximum OR Minimum |  |  |  |  |
| Minimum /Maximum Value |  |  |  |  |
| Sketch: Must have 3 key points labeled |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

2. Change each of the following into vertex form...
a) $y=-2 x^{2}-8 x+6$
b) $y=4 x^{2}+12 x-5$
3. Change the following into standard form and state the given properties.

$$
y=\frac{2}{3}(x+6)^{2}-23
$$



