Day 6 - Graphing in Standard Form Practice Assignment

Name: $\qquad$
Date: $\qquad$ Block: $\qquad$
Convert the following equations from vertex to standard form and find the $y$-intercept:
a. $y=(x-2)^{2}-8$
b. $y=(x+7)^{2}$

Find the vertex of the following:
C. $y=3 x^{2}-18 x+17$
d. $y=-x^{2}+8 x-10$

## Graph the following Quadratics:

1. $y=x^{2}+6 x+6$

| $\mathbf{x}$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{y}$ |  |  |  |  |  |


2. $y=3 x^{2}+6 x$

| $\mathbf{x}$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{y}$ |  |  |  |  |  |



Match the graph of a quadratic to an equation (there may be more than one answer):

| Equations: |
| :--- |
| a. $y=(x+2)^{2}$ |
| b. $y=(x+3)^{2}+2$ |
| c. $y=-x^{2}+6 x-7$ |
| d. $y=(x+2)^{2}+1$ |
| e. $y=x^{2}+4 x+4$ |
| f. $y=-(x-3)^{2}+2$ |

Answer (top graph)

Answer (bottom graph)


