| Intermediate Algebra | Name: |
|----------------------|--------|
| Study Guide 18 | Class: |
| Due Date: | Score: |

No Work \Leftrightarrow No Points

Use Pencil Only \Leftrightarrow Be Neat & Organized

- 1. Consider $f(x) = -\frac{1}{2}x^2 2x$, (a) (3 points) Find its vertex.
 - (b) (3 points) Find all its the x-ints.

- (c) (2 points) Find its the y-int.
- (d) (4 points) Graph. Draw its axis of symmetry.



(a) _____

(b) _____

(c) _____

- **2. Consider** $f(x) = x^2 + 4x + 5$,
 - (a) (3 points) Find its vertex.

(b) (3 points) Find all its the x-ints.

(c) (2 points) Find its the y-int.



(a) _____

(b) _____

(c) _____

- **3. Consider** $f(x) = -2(x+2)^2 + 8$,
 - (a) (3 points) Find its vertex.

(b) (3 points) Find all its the x-ints.

(c) (3 points) Find its the y-int.



 $\xrightarrow{y} \\ \xrightarrow{\uparrow} \\ \xrightarrow{\downarrow} \\ \xrightarrow{ } \\ \xrightarrow{ } \\ \xrightarrow{} \\ \xrightarrow{}$

(a) _____

(b) _____

(c) _____

4. Consider $f(x) = \frac{1}{4}(x-2)^2 - 4$, (a) (3 points) Find its vertex.

(b) (3 points) Find all its the x-ints.

(c) (3 points) Find its the y-int.



(d) (4 points) Graph. Draw its axis of symmetry.

(b) _____

(c) _____

(a) _____