

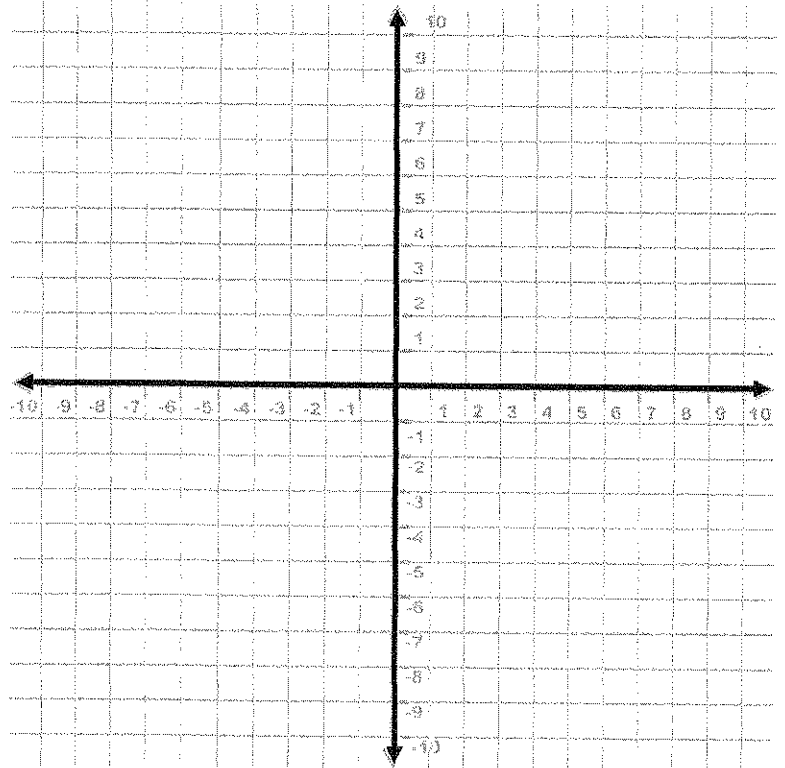
# quadratic FANATIC

## QUADRATIC EQUATION:

## COLOR:

1.  $y = x^2$
2.  $y = (x + 2)^2$
3.  $y = x^2 + 2$
4.  $y = (x - 3)^2 + 1$
5.  $y = -2(x + 3)^2 - 5$
6.  $y = -(x + 4)^2 + 3$
7.  $y = (x + 5)^2 - 6$
8.  $y = -(x - 7)^2 - 4$
9.  $y = 2(x - 8)^2 - 10$
10.  $y = -3(x - 1)^2 - 2$

- PENCIL
- RED
- GREEN
- BLUE
- ORANGE
- PURPLE
- BLACK
- PINK
- BROWN

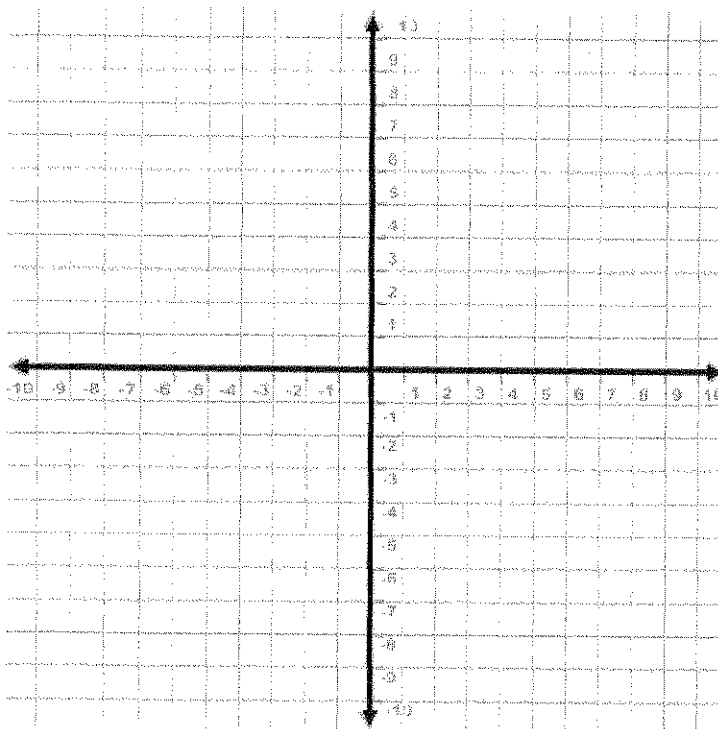


## DESCRIBE:

| HORIZONTAL TRANSFORMATION | VERTICAL TRANSFORMATION | OTHER TRANSFORMATION | Opens UP/DOWN? | VERTEX? |
|---------------------------|-------------------------|----------------------|----------------|---------|
| 1.                        | 1.                      | 1.                   | 1.             | 1.      |
| 2.                        | 2.                      | 2.                   | 2.             | 2.      |
| 3.                        | 3.                      | 3.                   | 3.             | 3.      |
| 4.                        | 4.                      | 4.                   | 4.             | 4.      |
| 5.                        | 5.                      | 5.                   | 5.             | 5.      |
| 6.                        | 6.                      | 6.                   | 6.             | 6.      |
| 7.                        | 7.                      | 7.                   | 7.             | 7.      |
| 8.                        | 8.                      | 8.                   | 8.             | 8.      |
| 9.                        | 9.                      | 9.                   | 9.             | 9.      |
| 10.                       | 10.                     | 10.                  | 10.            | 10.     |

# Absolute Value Graphs

| Absolute Value Equation:          | Graph Color: |
|-----------------------------------|--------------|
| 1. $y =  x $                      | PENCIL       |
| 2. $y =  x + 2 $                  | RED          |
| 3. $y =  x  + 2$                  | GREEN        |
| 4. $y =  x - 3  + 1$              | BLUE         |
| 5. $y = -2 x + 3  - 5$            | ORANGE       |
| 6. $y = - x + 4  + 3$             | PURPLE       |
| 7. $y =  x + 5  - 6$              | BLACK        |
| 8. $y = - x - 7  - 4$             |              |
| 9. $y = 2 x - 8  - 10$            | PINK         |
| 10. $y = -\frac{1}{3} x - 1  - 2$ | BROWN        |



Describe the following features:

| Opens Up/Down? | Vertex? | Domain | Range | Slope of the lines | List ALL Transformations |
|----------------|---------|--------|-------|--------------------|--------------------------|
| 1.             | 1.      | 1.     | 1.    | 1.                 | 1.                       |
| 2.             | 2.      | 2.     | 2.    | 2.                 | 2.                       |
| 3.             | 3.      | 3.     | 3.    | 3.                 | 3.                       |
| 4.             | 4.      | 4.     | 4.    | 4.                 | 4.                       |
| 5.             | 5.      | 5.     | 5.    | 5.                 | 5.                       |
| 6.             | 6.      | 6.     | 6.    | 6.                 | 6.                       |
| 7.             | 7.      | 7.     | 7.    | 7.                 | 7.                       |
| 8.             | 8.      | 8.     | 8.    | 8.                 | 8.                       |
| 9.             | 9.      | 9.     | 9.    | 9.                 | 9.                       |
| 10.            | 10.     | 10.    | 10.   | 10.                | 10.                      |