

### Graph Worksheet #3

For each of the following equations, graph the given curve and then show algebraically if it is an odd or even function (or neither). For those curves that are not functions you don't need to do this! Calculators should be used to check only.

1.  $y = x$

2.  $y = \frac{x(x-2)}{x-2}$

3.  $y = 3 \cos 2x$

4.  $25(y-3)^2 - 4(x+2)^2 = 100$

5.  $y = \log_2(x-5) + 2$

6.  $y = |x-2| - 3$

7.  $y = (x+3)^2 + 2$

8.  $r = 2 + 4 \cos \theta$

9.  $y = \frac{3}{x-2} - 4$

10.  $y = \sqrt{16-x^2}$

11.  $y = \frac{(x+3)(x-1)}{(x+1)(x-2)}$

12.  $y = 2^{-x}$