

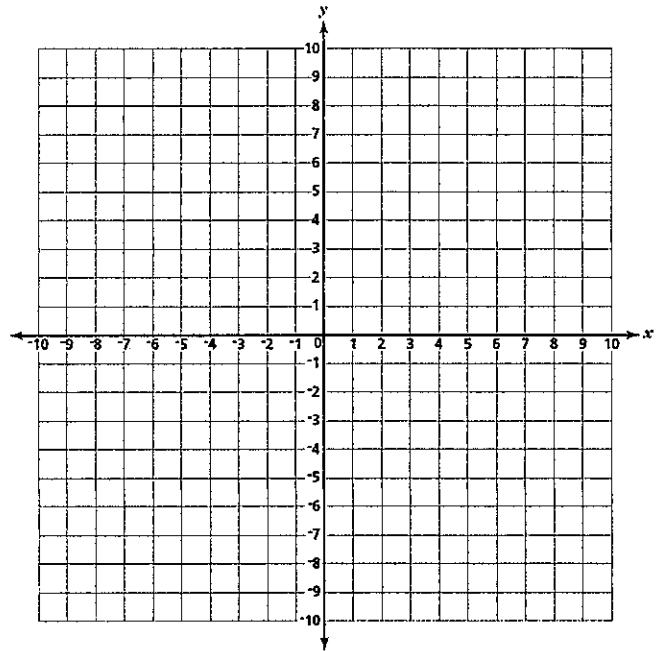
Name _____
8A; Algebra 1

Date _____
Period _____

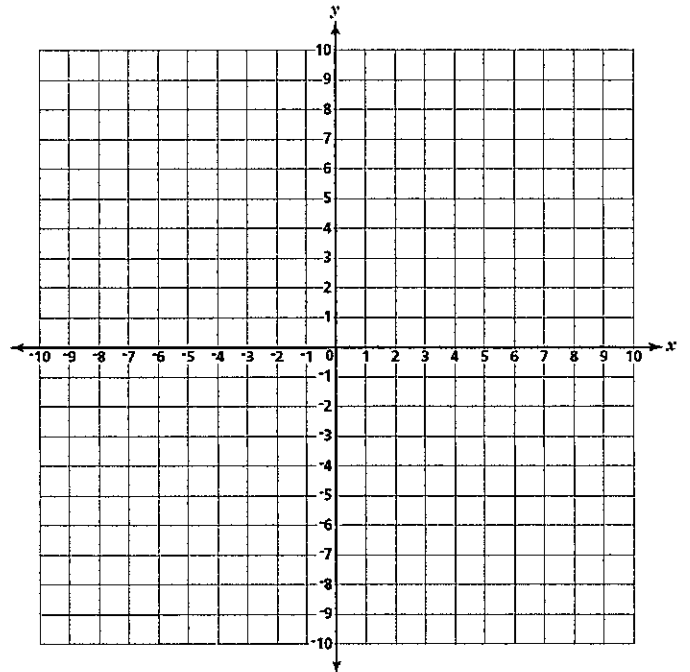
Homework

#'s 1-3: Graph the following cubic functions.

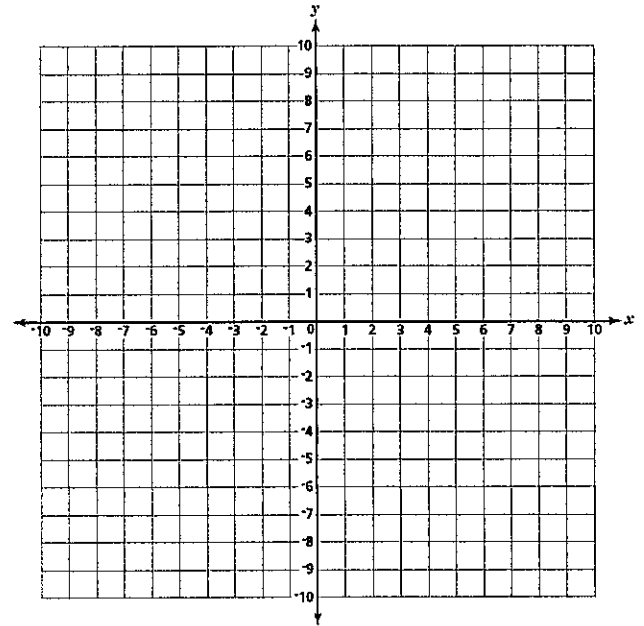
1) $y = x^3 - 2$



2) $y = -(x + 3)^3$



3) $y = (x - 2)^3 + 5$



#'s 4-5: How would each of the following graphs change in relation to the parent graph?

4) $y = (x + 4)^3$

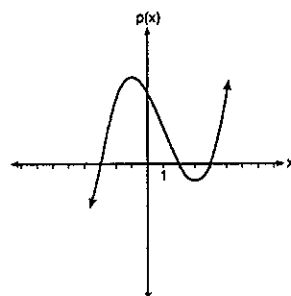
5) $y = x^3 - 6$

#'s 6-7: Use the description to write the cubic function.

6) The parent function is translated 4 units right and 6 units down.

7) The parent function is reflected in the x-axis, wider by a scale factor of $\frac{1}{2}$, & translated 5 units left.

8) Based on the graph below, which expression is a possible factorization of $p(x)$?



- 1) $(x + 3)(x - 2)(x - 4)$
- 2) $(x - 3)(x + 2)(x + 4)$

- 3) $(x + 3)(x - 5)(x - 2)(x - 4)$
- 4) $(x - 3)(x + 5)(x + 2)(x + 4)$