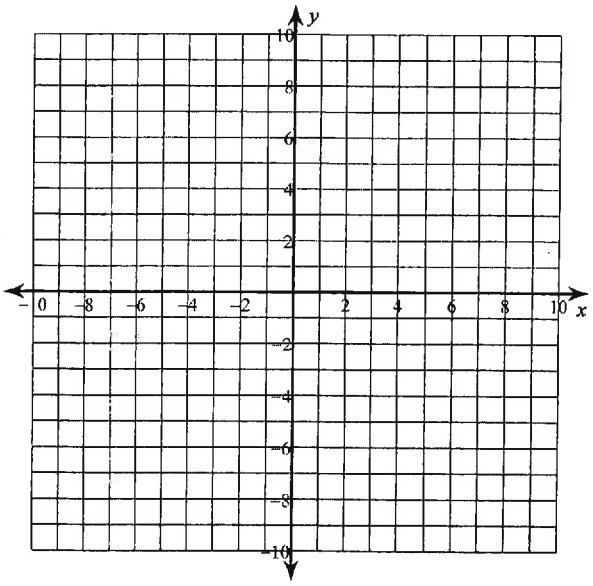
Algebra 1 Name_____ ID: 1

End-of-Year Review of Essential Skills A: Linear Functions

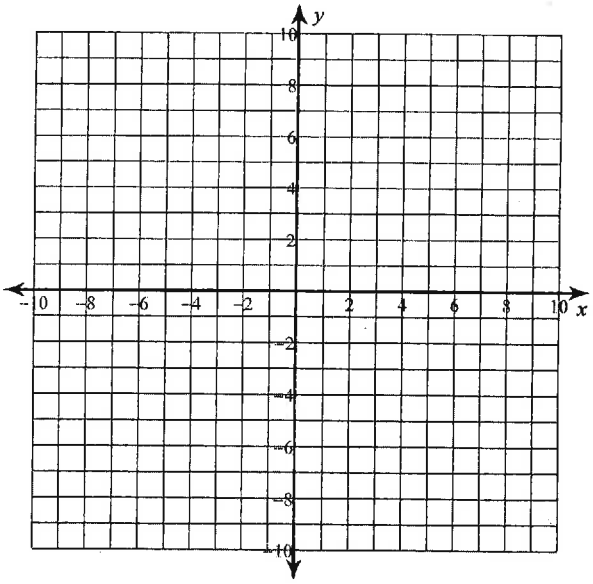
Period____

I. Identify the slope and y-intercept. Then use them to sketch the graph of each line.

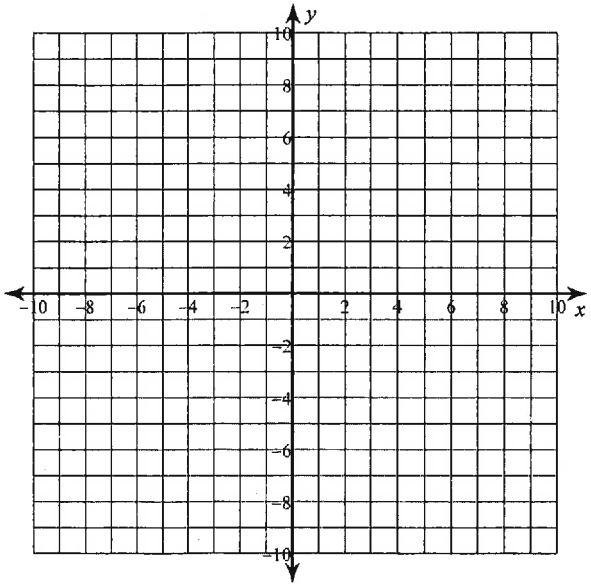
1) $y = 3x - 3$



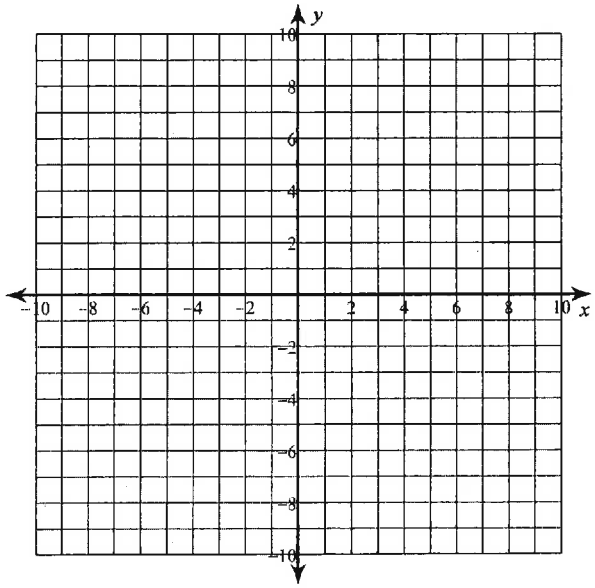
2) $y = -2x$



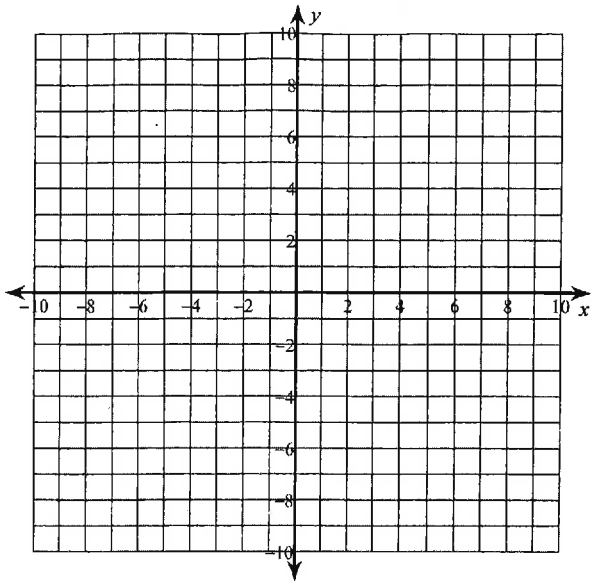
3) $y = \frac{3}{4}x + 5$



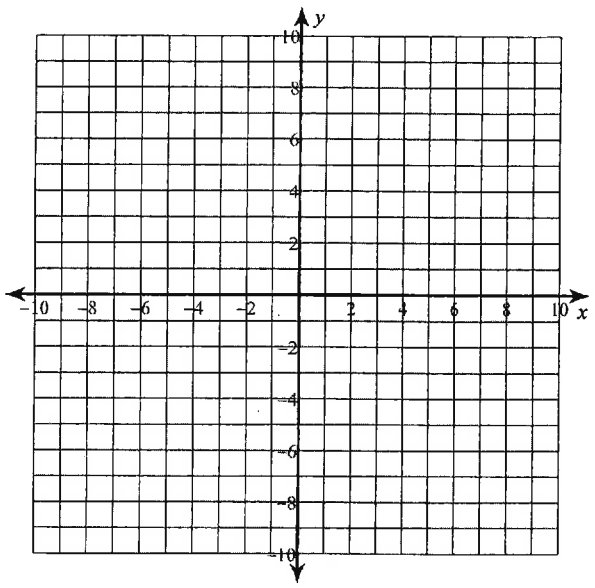
4) $y = 2$



5) $x = 5$

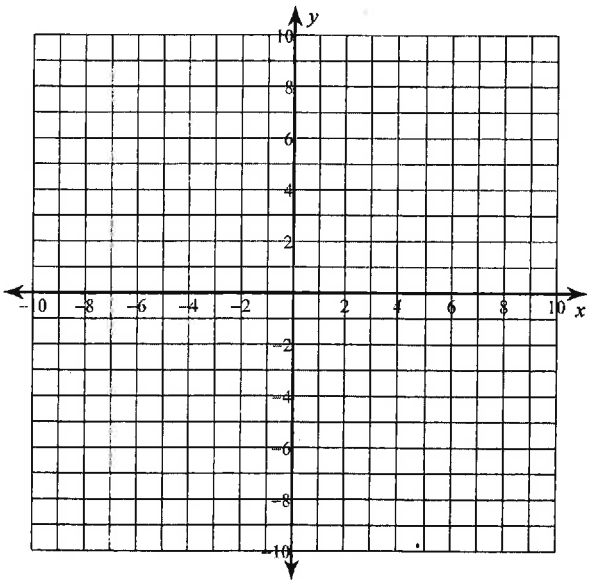


6) $y = -\frac{7}{4}x + 4$

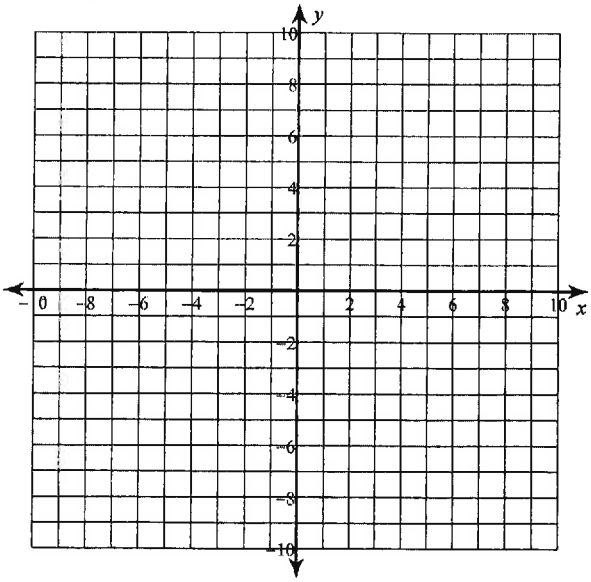


II. Identify the x- & y-intercepts first. Then use them to sketch the graph of each line.

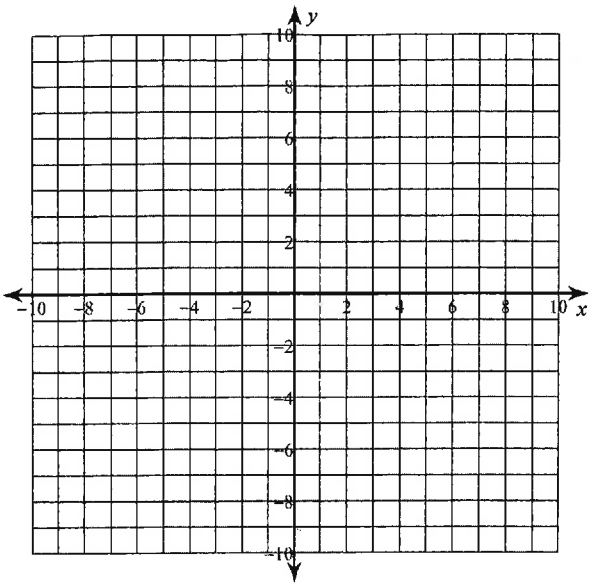
7) $x + 2y = 6$



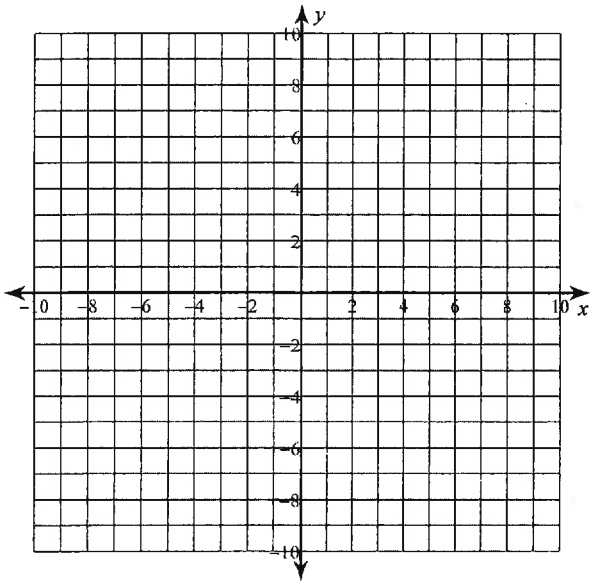
8) $5x - 3y = -15$



9) $2x - 3y = -12$

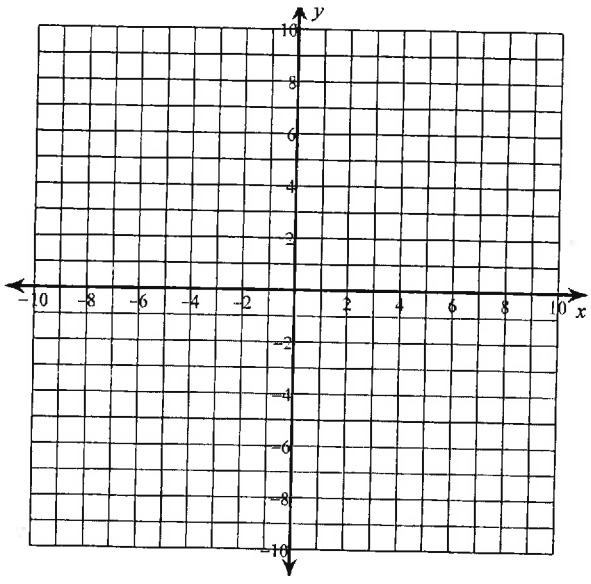


10) $x - y = -3$

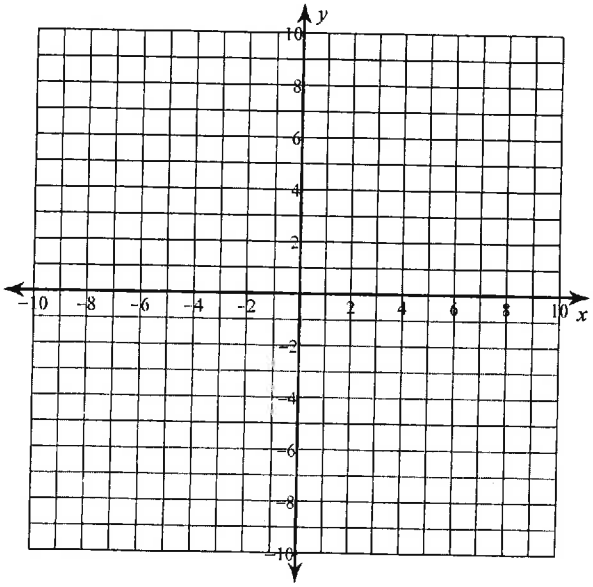


III. Use any method to sketch the graph of each line. You may need to clear fractions or re-arrange the equations first.

11) $-\frac{10}{7}y = -2x - \frac{50}{7}$



12) $-\frac{1}{4}y - \frac{1}{12}x = -1$



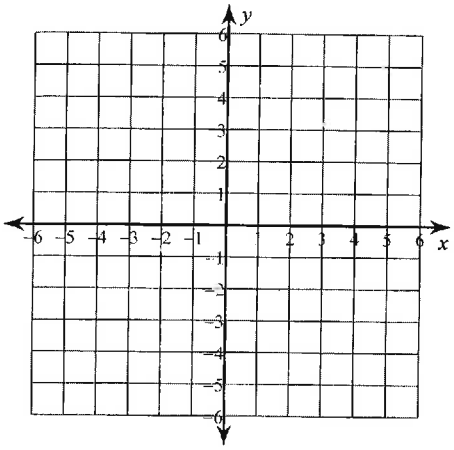
Algebra 1 Name_____ ID: 1

End-of-Year Review of Essential Skills B: Absolute Value Functions

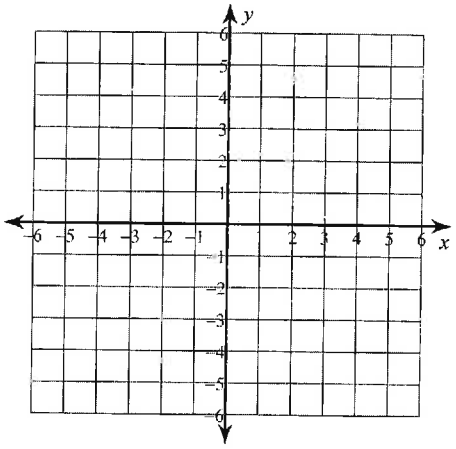
Period____

1) Identify the vertex. 2) Create a table of 5 values. 3) Graph each equation.

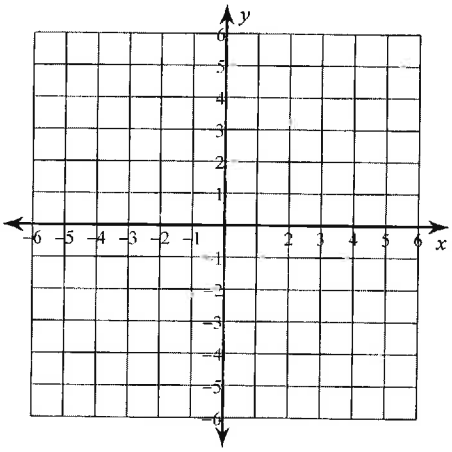
1) $y = |x - 2| + 3$



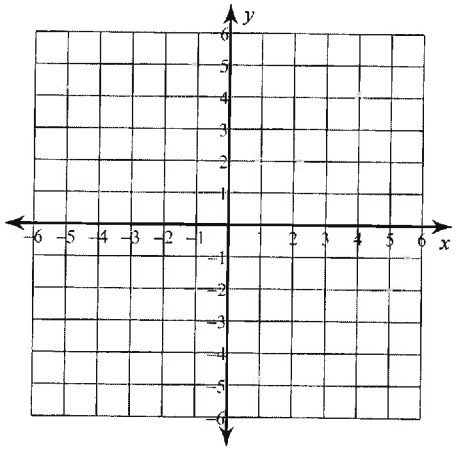
2) $y = -|x| - 3$



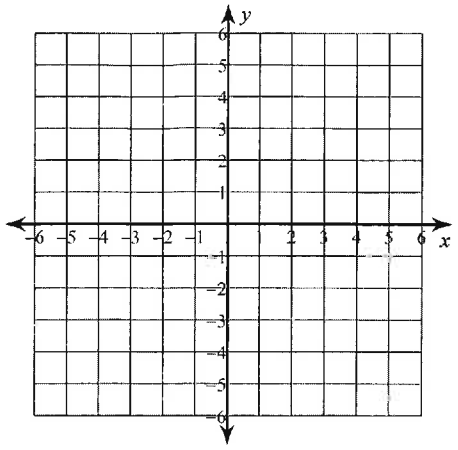
3) $y = -|x - 4| - 3$



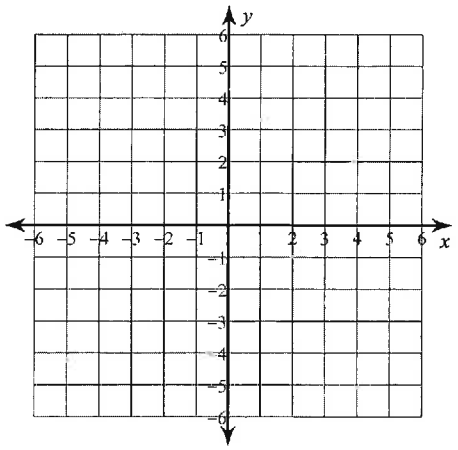
4) $y = |x - 3|$



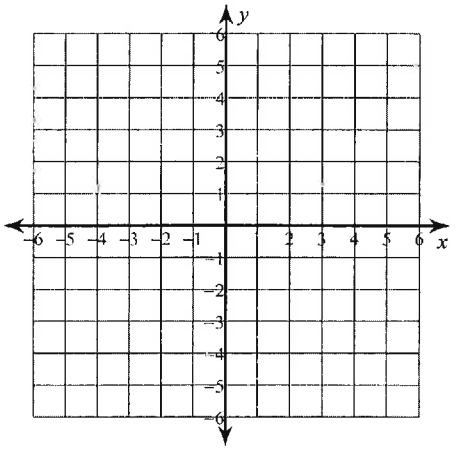
5) $y = -|x - 1| + 4$



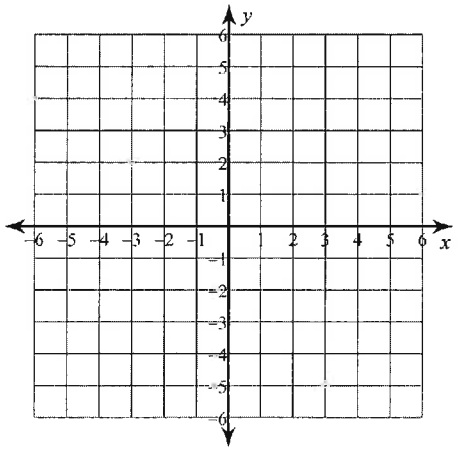
6) $y = |x - 4| + 4$



7) $y = -|x - 3| + 2$



8) $y = |x + 4| + 3$



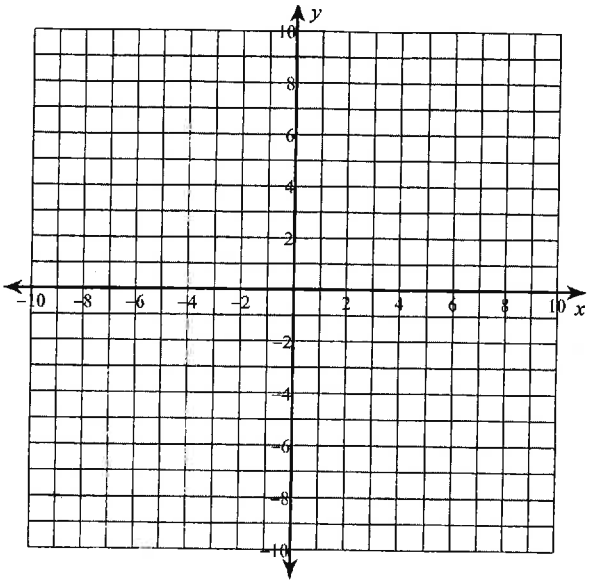
Algebra 1 Name_____ ID: 1

End-of-Year Review of Essential Skills C: Quadratic Functions

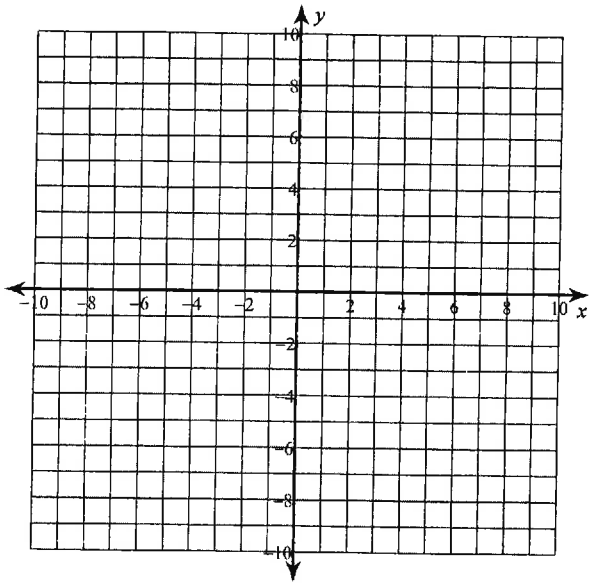
Period____

1) Find the a.o.s x= -b/2a. 2) Find the vertex. 3) Create a table of 5 values. 4) Sketch the graph of each function.

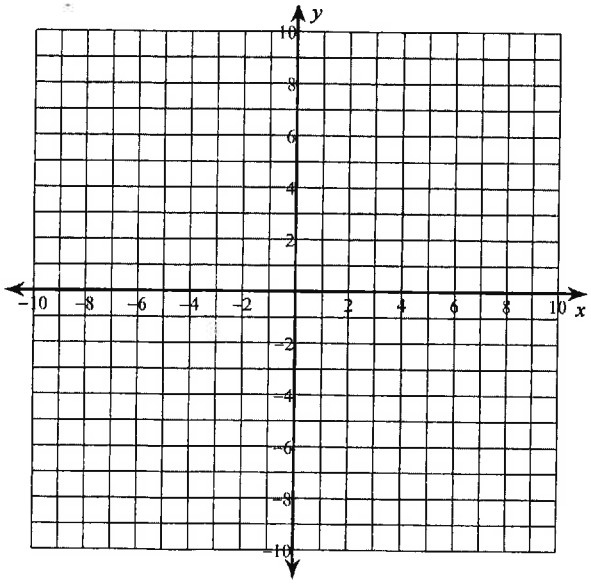
1) $y = 2x^2 - 8x + 9$



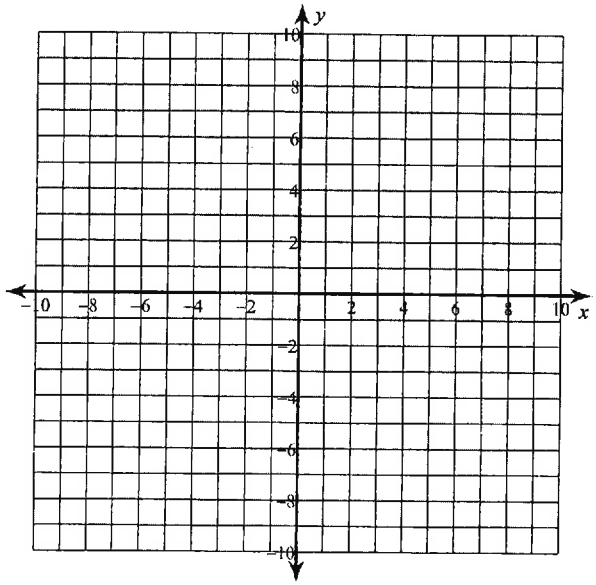
2) $y = x^2 + 8x + 15$



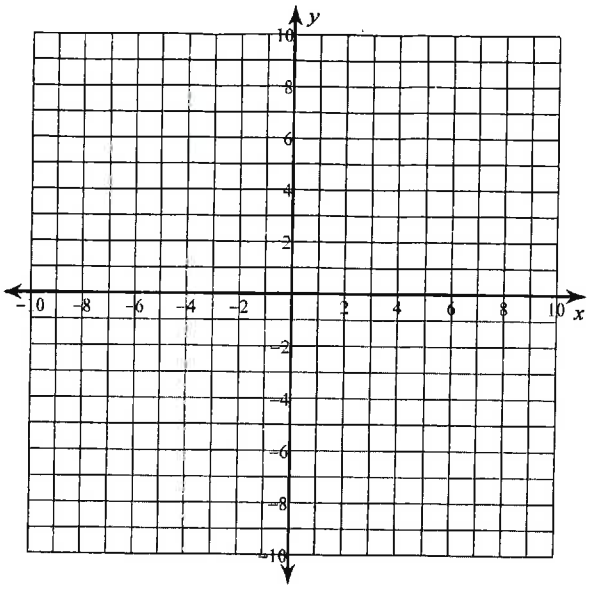
3) $y = -x^2 + 6x - 11$



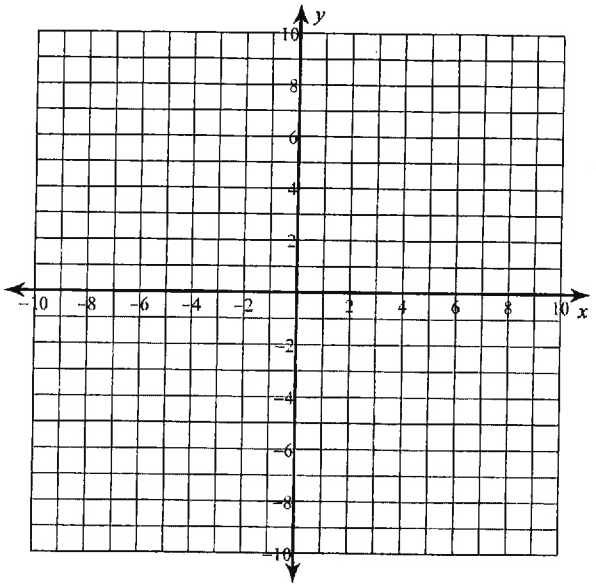
4) $y = 3x^2 + 6x - 1$



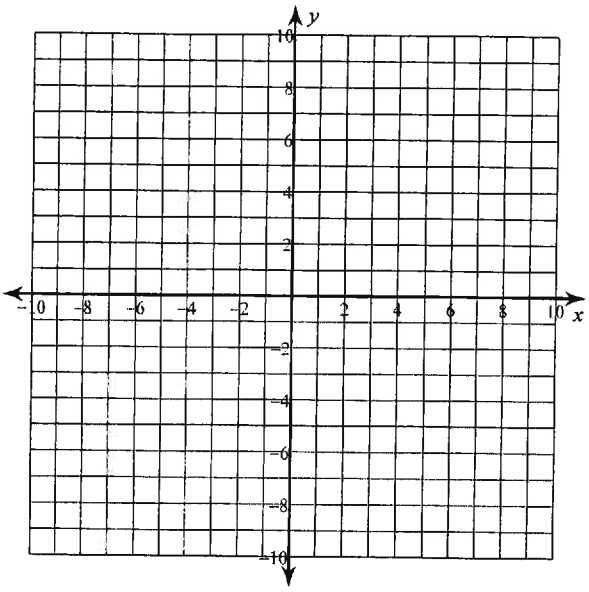
5) $y = x^2 - 2x + 3$



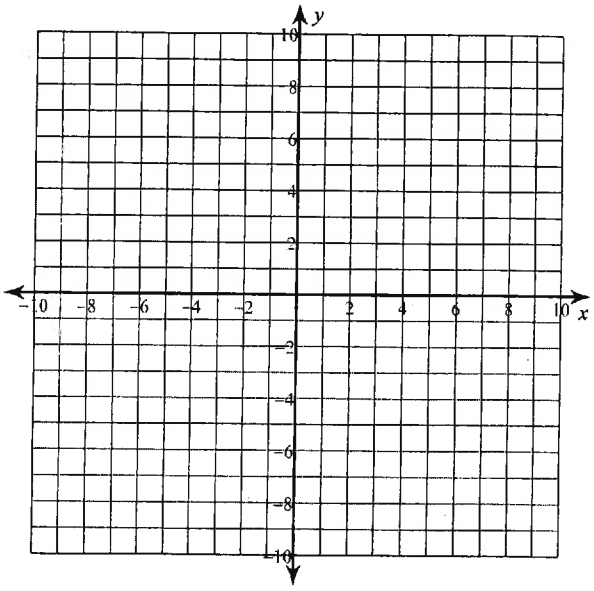
6) $y = 2x^2 + 8x + 9$



7) $y = 2x^2 + 4x + 5$



8) $y = -x^2 - 6x - 6$



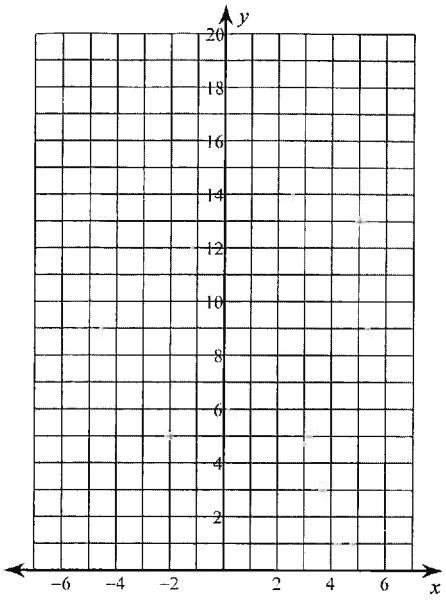
Algebra 1 Name_____ ID: 1

End-of-Year Review of Essential Skills D: Exponential Functions

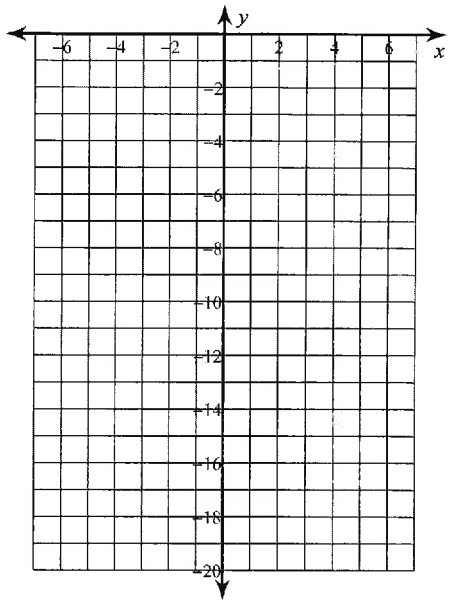
Period____

1) Create a table of 5 values 2) Sketch the graph of each function.

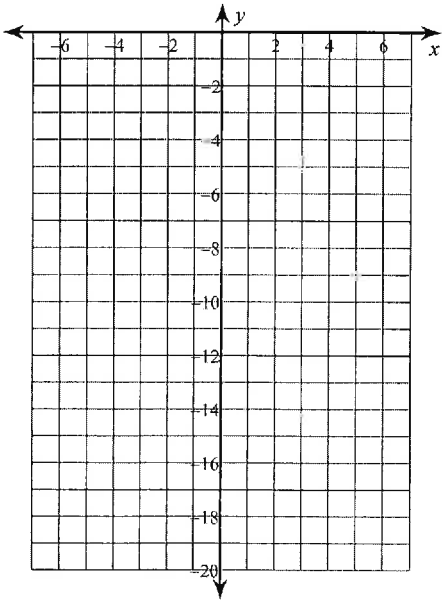
1) $y = 2 \cdot \left(\frac{1}{3}\right)^x$



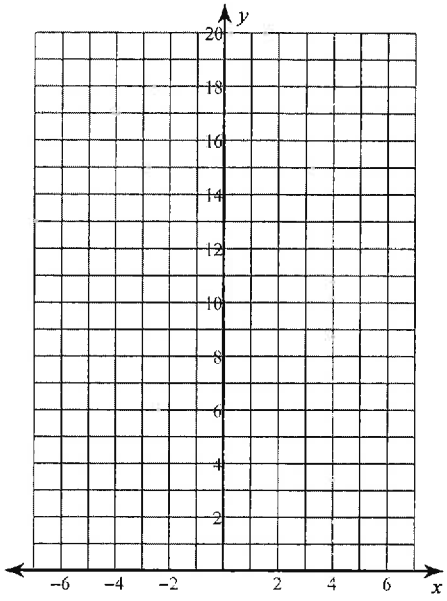
2) $y = -\frac{1}{4} \cdot \left(\frac{1}{2}\right)^x$



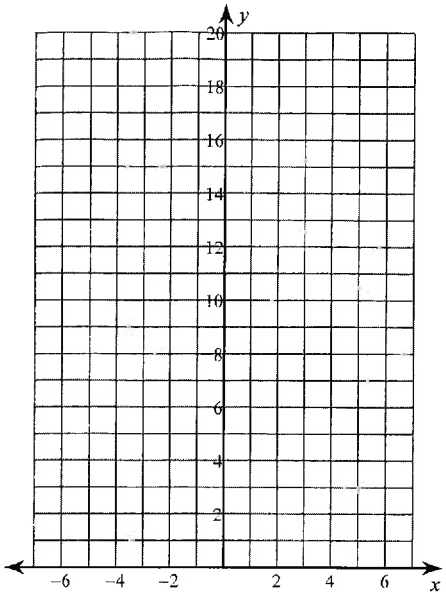
3) $y = -\frac{1}{2} \cdot \left(\frac{1}{2}\right)^x$



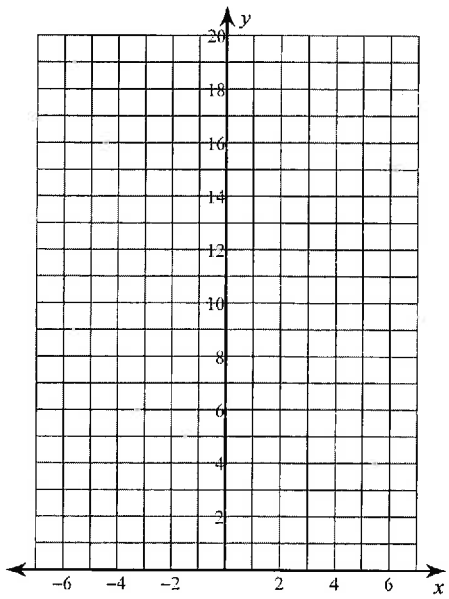
4) $y = \frac{1}{3} \cdot \left(\frac{1}{6}\right)^x$



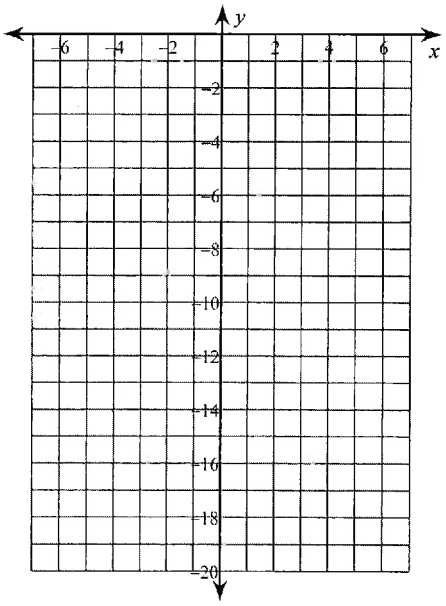
5) $y = 3 \cdot \left(\frac{1}{2}\right)^x$



6) $y = 5 \cdot \left(\frac{1}{2}\right)^x$



7) $y = -5 \cdot 2^x$



8) $y = 4 \cdot 2^x$