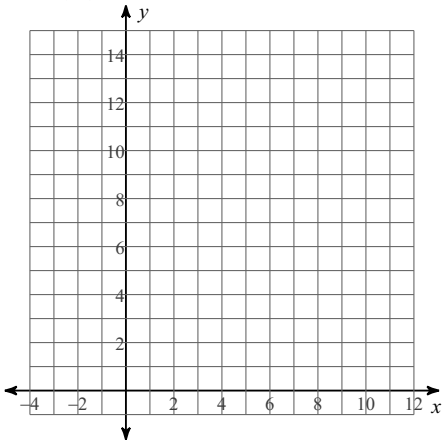
Algebra 1 Name_____

Week Twenty-Six Homework

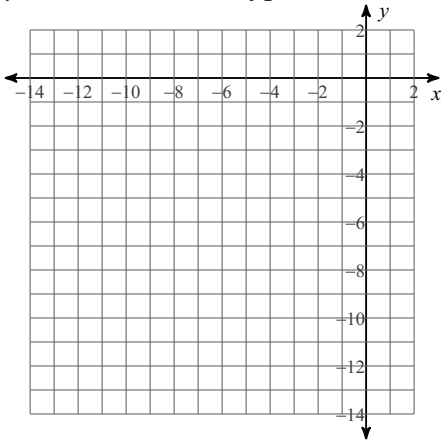
Date_____ Period____

Graph and identify each exponential function.
You may want to use a graphing calculator program.

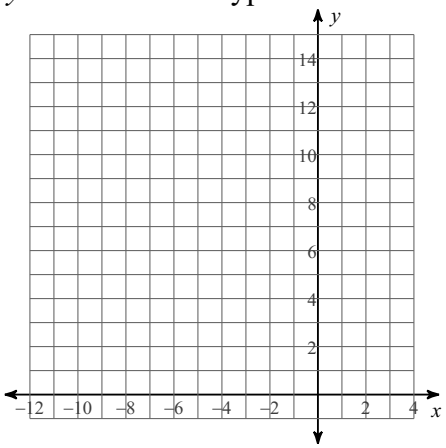
1) $y = \left(\frac{1}{3}\right)^x + 2$ Type:



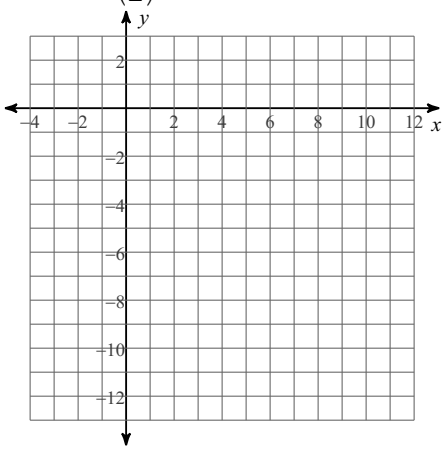
2) $y = -5 \cdot 4^x - 3$ Type:



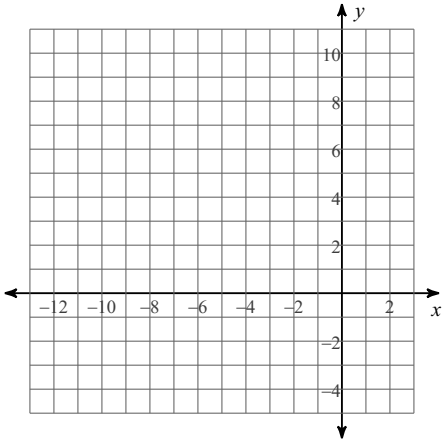
3) $y = 3 \cdot 2^x + 1$ Type:



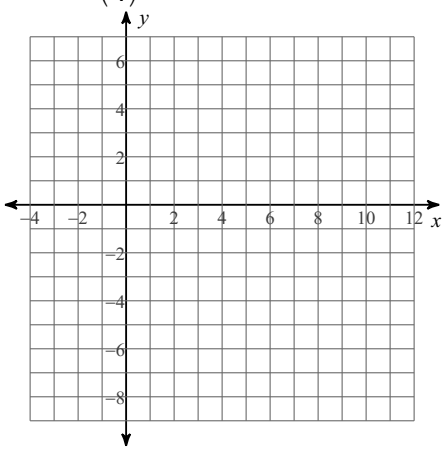
4) $y = -3 \cdot \left(\frac{1}{2}\right)^x + 1$ Type:



5) $y = 6 \cdot 3^x - 4$ Type:



6) $y = 2 \cdot \left(\frac{1}{4}\right)^x - 7$ Type:



Solve each proportion by cross-multiplication.

7) $\frac{9.31}{x-6.3}=\frac{4.64}{x+4.7}$

8) $\frac{x+3.7}{5.23}=\frac{x-10.8}{9.86}$

9) $\frac{x+8.7}{x+9.3}=\frac{5.94}{17.45}$

10) $\frac{4.92}{9.74}=\frac{x+8.7}{x-1.8}$

Solve each multi-step equation.

11) $121.78=-5.34x-4.87(-5.07x-4.34)$

12) $8.47(2.66+6.49x)-245.06=-128.5$

13) $-112.98=6.82x-9.68(7.45x+16.45)$

14) $8.92(10.36-7.4x)-8.22x+1.6=-184.94$

Solve each equation exponential for x. All x-values will be whole numbers.

15) $4.28\cdot 3^{x}-23.75=91.81$

16) $-2.72\cdot 6^{x}-118.47=-3643.59$

17) $13.87\cdot 9^{x}+113.28=114.8211$

18) $-34.67\cdot 5^{x}+818.38=-48.37$