Algebra 2
Exponential Graphing

Name: _____
Period: _____

Identify the parent function and describe the transformations.

1. $a(x)=(10)^{x-3}+12$

2. $b(x)=6\left(\frac{1}{2}\right)^{x+9}$

3. $c(x)=-3(2)^{x}+2$

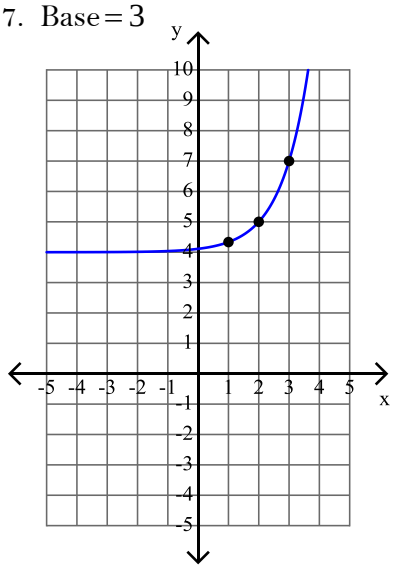
4. $d(x)=4\left(\frac{1}{3}\right)^{x+5}+1$

5. $f(x)=-(3)^{x}-5$

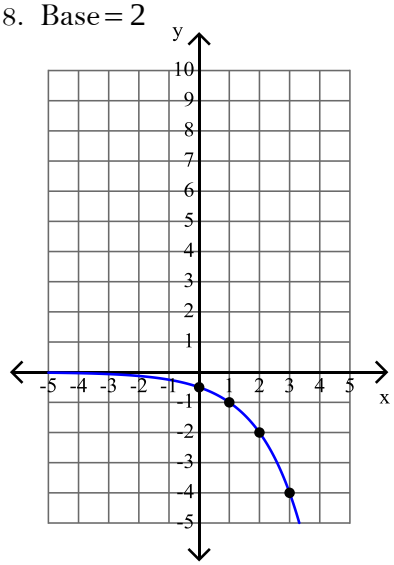
6. $g(x)=-\frac{1}{2}\left(\frac{1}{10}\right)^{x}-3$

Find the equation for each function.

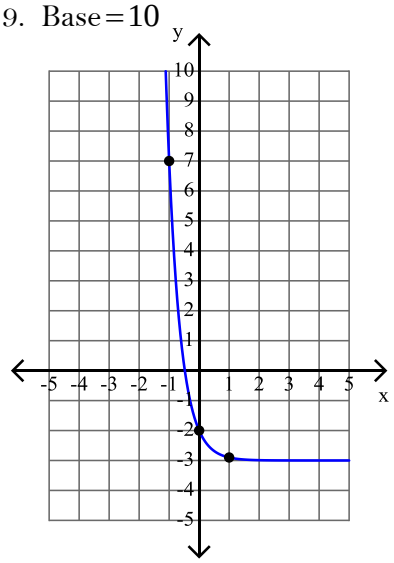
7. Base = 3



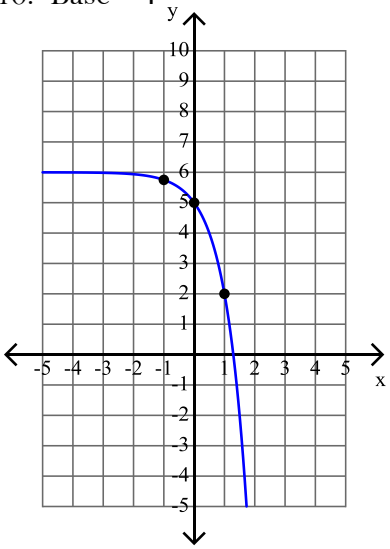
8. Base = 2



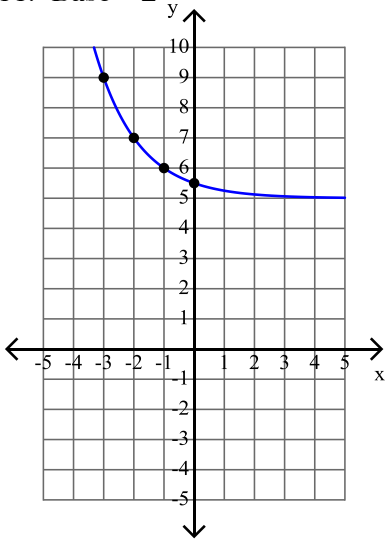
9. Base = 10



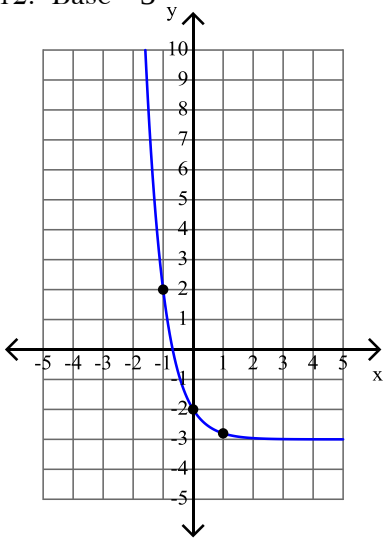
10. Base = 4



11. Base = 2



12. Base = 5



Sketch a complete graph of each function.

13. $m(x)=2^{x-1}+4$

14. $n(x)=-5^{x}+3$

15. $p(x)=\left(\frac{1}{10}\right)^{x}-4$

16. $r(x)=\left(\frac{1}{3}\right)^{x-1}+5$

17. $s(x)=-3^{x}-1$

18. $t(x)=6^{x+1}-2$