

6.1 Exponential Growth & Decay DAY ONE CYU

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Evaluating exponential expressions	1, 2	3, 4	5, 6
Initial value	7 - 12		
Growth/Decay Factor	7 - 12		
Horizontal Asymptote	7 - 12		
Domain and Range		7 - 12	
Creating t-charts	7 - 12		
Graphing Exponential functions		7 - 12	
Determining Growth VS Decay	7 - 12		

Evaluate the expression for $x = -2$ and $x = 3$. Show all work for full credit.

1. 2^x

2. 4^x

3. $8 \cdot 3^x$

4. $6 \cdot 2^x$

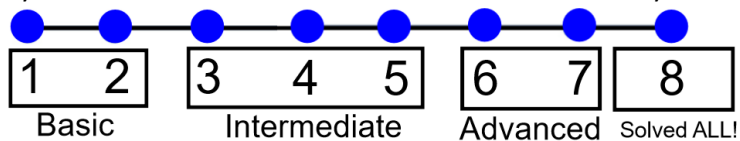
5. $5 + 3^x$

6. $2^x - 2$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

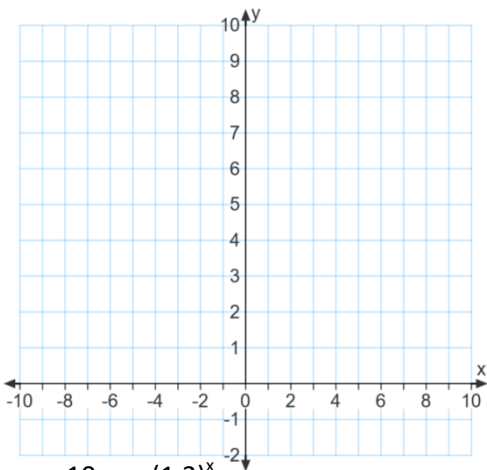


Tell whether the function represents exponential growth or exponential decay. Determine the “a,” “r,” and “b” value and the horizontal asymptote. Create a t-chart and then graph the function. Then state the domain and range.

7. $y = 6^x$

a: r:
b: y =

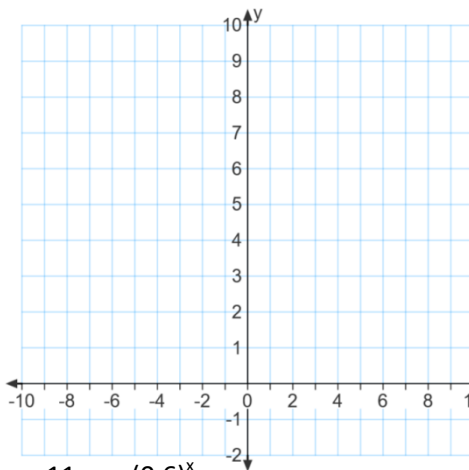
X	Y



8. $y = \left(\frac{1}{6}\right)^x$

a: r:
b: y =

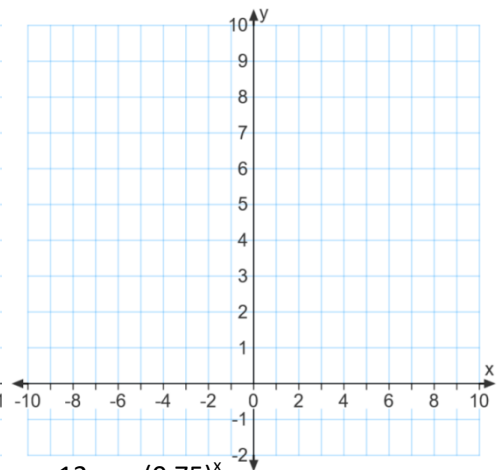
X	Y



9. $y = \left(\frac{4}{3}\right)^x$

a: r:
b: y =

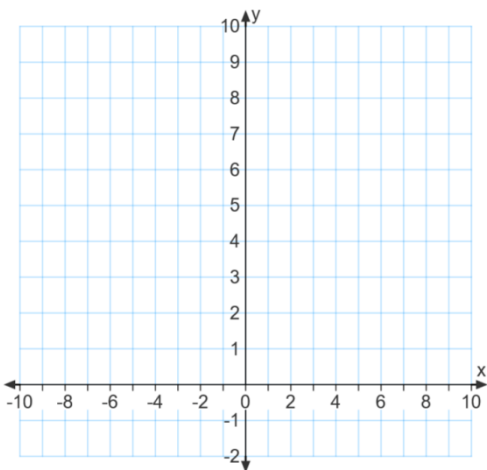
X	Y



10. $y = (1.2)^x$

a: r:
b: y =

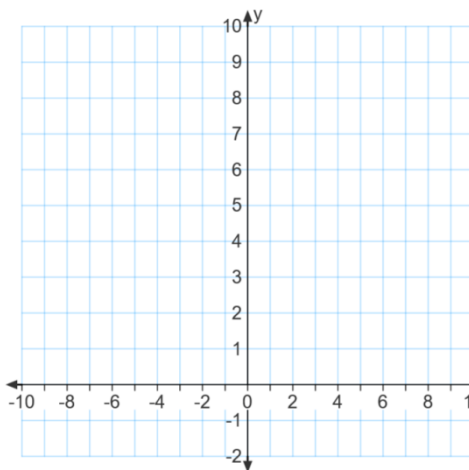
X	Y



11. $y = (0.6)^x$

a: r:
b: y =

X	Y



12. $y = (0.75)^x$

a: r:
b: y =

X	Y

