

Warm Up 11/(Which 9 Weeks it is)

Get a calculator!!!

Find the equation for each table.

1)	x	y	2)	x	y	3)	x	y
	-2	-1/2		-1	-18		-2	80000
	-1	-2		0	10		-1	8000
	0	-8		1	38		0	800
	1	-32		2	66		1	80
	2	-128		3	94		2	8

• Find the equation.

x	y
0	24
1	30
2	37.5
3	46.875

• Find the equation

x	y
4	24
6	30
8	36
10	42

• Find the equation

x	y
-2	2/9
0	2
2	18
4	162

• Find the equation

x	y
0	10
1	16
2	24
3	34

CHECK HOMEWORK

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OBJECTIVE

Identify and Graph Exponential Functions

Exponential Functions have the form $f(x) = ab^x$ where $a \neq 0$, $b \neq 1$, and $b > 0$

a is the "initial value"

b is the growth or decay rate

Asymptote

Asymptote: A line that a curve approaches (but does not cross), as it heads towards infinity

Represented by a **dashed line** on a graph

GRAPHING EXPONENTIAL FUNCTIONS!

Example 1: $y = 9(3)^x$

x	y
-2	1
-1	3
0	9
1	27
2	81