

Linear vs Exponential Functions Practice

Name _____ Pd _____

Identify the function as linear or exponential and determine the slope or growth factor. Write the rule for each function and sketch a graph labeling the y-intercept.

1) Table

Graph

X	-2	-1	0	1	2	3
Y	$\frac{1}{4}$	$\frac{1}{2}$	1	2	4	8

Rule

Type of function:

2) Table

Graph

X	-2	-1	0	1	2	3
Y	-4	-2	0	2	4	6

Rule

Type of function:

3) Table

Graph

X	-2	-1	0	1	2	3
Y	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	1	2

Rule

Type of function:

4) Table

Graph

X	-2	-1	0	1	2	3
Y	-2	0	2	4	6	8

Rule

Type of function:

5) Table

Graph

X	-2	-1	0	1	2	3
Y	11	8	5	2	-1	-4

Rule

Type of function:

6) Table

Graph

x	-2	-1	0	1	2	3
y	64	16	4	1	$\frac{1}{4}$	$\frac{1}{16}$

Rule

Type of function:

7) Table

Graph

x	-2	-1	0	1	2	3
y	4	4	4	4	4	4

Rule

Type of function:

8) Table

Graph

x	-2	-1	0	1	2	3
y	81	27	9	3	1	$\frac{1}{3}$

Rule

Type of function:

9) Table

Graph

x	-2	-1	0	1	2	3
y	36	24	12	0	-12	-24

Rule

Type of function:

10) Table

Graph

x	-2	-1	0	1	2	3
y	512	64	8	1	$\frac{1}{8}$	$\frac{1}{64}$

Rule

11) Table

Graph

x	-2	-1	0	1	2	3
y	$\frac{2}{5}$	2	10	50	250	1250

Rule

Type of function:

12) Table

Graph

x	-2	-1	0	1	2	3
y	$\frac{5}{9}$	$\frac{5}{3}$	5	15	45	135

Rule

Type of function:

13) Table

Graph

x	-2	-1	0	1	2	3
y	$\frac{42}{8}$	$4\frac{5}{8}$	4	$\frac{27}{8}$	$\frac{22}{8}$	$2\frac{1}{8}$

Rule

Type of function:

14) Table

Graph

x	-2	-1	0	1	2	3
y	$\frac{25}{4}$	$\frac{5}{2}$	1	0.4	$\frac{4}{25}$	$\frac{8}{125}$

Rule

Type of function:

15) Table

Graph

x	-2	-1	0	1	2	3
y	16	24	36	54	81	121.5

Rule

Type of function:

16) Table

Graph

x	-2	-1	0	1	2	3
y	64	48	36	27	$20\frac{1}{4}$	$\frac{243}{16}$

Rule

Type of function: