Math Practice - Grade 8

M5 Functions - Linear or nonlinear?

M5 8.F.A.1, 8.F.A.2, 8.F.A.3

Name: _____ Date: _____

Is the function linear or nonlinear? Circle it.

Example: Is y = 3x linear or nonlinear?

How: A linear function has a constant rate of change and its graph is a straight line. If the differences in y change, or the graph curves, it is nonlinear.

Linear Nonlinear

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1 **Is y = 3x + 1 linear or nonlinear?**

Linear Nonlinear

2

x	y
0	5
1	9
2	13
3	17

Linear Nonlinear

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3 **Is y = 4x + 2 linear or nonlinear?**

Linear Nonlinear

Math Practice - Grade 8

M5 Functions - Linear or nonlinear?

M5 8.F.A.1, 8.F.A.2, 8.F.A.3

Name: _____ Date: _____

Is the function linear or nonlinear? Circle it.

Example: Is $y = x^2 + 4$ linear or nonlinear?

How: A linear function has a constant rate of change and its graph is a straight line. If the differences in y change, or the graph curves, it is nonlinear.

Linear | Nonlinear (circled)

1

x	y
0	0
1	1
2	4
3	9

Linear | Nonlinear

2

x	y
0	0
1	1
2	4
3	9

Linear | Nonlinear

3

x	y
0	3
1	4
2	7
3	12

Linear | Nonlinear

Math Practice - Grade 8

M5 Functions - Linear or nonlinear?

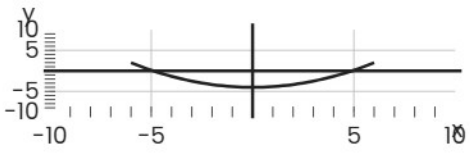
M5 8.F.A.1, 8.F.A.2, 8.F.A.3

Name: _____ Date: _____

Is the function linear or nonlinear? Circle it.

Example: Is the function in the graph linear or nonlinear?

How: A linear function has a constant rate of change and its graph is a straight line. If the differences in y change, or the graph curves, it is nonlinear.



Linear | Nonlinear

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1 **Is $y = x^2 + 1$ linear or nonlinear?**

Linear | Nonlinear

2

x	y
0	0
1	4
2	8
3	12

Linear | Nonlinear

3

x	y
0	3
1	5
2	7
3	9

Linear | Nonlinear