Math Practice - Grade 8

M5 Functions - Compare two functions by rate of change

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

Name: _____ Date: _____

Read both functions. Circle the one with the greater rate of change.

Example: Function A is shown in the table. Function B is y = 4x. Which function has the greater rate of change?

How: Find the rate of change of each function, the change in y over the change in x. The greater rate of change is the steeper function.

x	y
0	4
1	7
2	10

Function B: y = 4x

Function A | Function B

---

1 **Function A is shown in the table. Function B is y = x. Which function has the greater rate of change?**

x	y
0	5
1	9
2	13

Function B: y = x

Function A | Function B

---

2 **Function A is shown in the table. Function B is y = 2x + 3. Which function has the greater rate of change?**

x	y
0	0
1	1
2	2

Function B: y = 2x + 3

Function A | Function B

---

3 **Function A is shown in the table. Function B is y = 5x + 1. Which function has the greater rate of change?**

x	y
0	2
1	4
2	6

Function B: y = 5x + 1

Function A | Function B

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Example: Function A is shown in the table. Function B is y = 5x. Which function has the greater rate of change?

How: Find the rate of change of each function, the change in y over the change in x. The greater rate of change is the steeper function.

x	y
0	4
1	6
2	8

Function B: y = 5x

Function A | Function B

---

1 **Function A is shown in the table. Function B is y = 2x + 3. Which function has the greater rate of change?**

x	y
0	0
1	1
2	2

Function B: y = 2x + 3

Function A | Function B

---

2 **Function A is shown in the table. Function B is y = 3x + 3. Which function has the greater rate of change?**

x	y
0	4
1	9
2	14

Function B: y = 3x + 3

Function A | Function B

---

3 **Function A is shown in the table. Function B is y = 2x + 3. Which function has the greater rate of change?**

x	y
0	2
1	3
2	4

Function B: y = 2x + 3

Function A | Function B

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

Name: _____ Date: _____

Read both functions. Circle the one with the greater rate of change.

Example: Function A is shown in the table. Function B is y = 2x + 2. Which function has the greater rate of change?

How: Find the rate of change of each function, the change in y over the change in x. The greater rate of change is the steeper function.

x	y
0	5
1	6
2	7

Function B: y = 2x + 2

Function A | Function B

---

1 **Function A is shown in the table. Function B is y = 5x + 4. Which function has the greater rate of change?**

x	y
0	2
1	3
2	4

Function B: y = 5x + 4

Function A | Function B

---

2 **Function A is shown in the table. Function B is y = 4x + 2. Which function has the greater rate of change?**

x	y
0	1
1	6
2	11

Function B: y = 4x + 2

Function A | Function B

---

3 **Function A is shown in the table. Function B is y = 5x + 4. Which function has the greater rate of change?**

x	y
0	4
1	5
2	6

Function B: y = 5x + 4

Function A | Function B