

Average Rate of Change from Tables

Find each average rate of change. Round to the nearest hundredth when needed; halfway values round away from zero.

Table 1

x	f(x)
-5	38.79
-3	38.79
0	38.79
9	38.79
11	38.79
12	38.79

Question 1: Rate from -5 to 9

Table 2

x	f(x)
-11	-54.6
-6	-18.6
0	-1.8
3	-4.2
4	-6.6
6	-13.8

Question 1: Rate from -6 to 0

Table 3

x	f(x)
-12	0.8
-8	0.4
-6	0.2
-1	-0.3
9	0.7
12	1

Question 1: Rate from -12 to 9

Table 4

x	f(x)
-8	-0.44
-7	-0.41
1	-0.17
2	-0.14
5	-0.05
8	0.04

Question 1: Rate from 2 to 8

Table 5

x	f(x)
-6	-1.5
-5	-1.4
-4	-1.3
1	-0.8
5	-0.4
10	0.1

Question 1: Rate from 10 to 5

Table 6

x	f(x)
-12	-17
-2	-0.1
-1	-0.06
1	-0.1
7	3.14
12	16.84

Question 1: Rate from 7 to -12

Math Sheet

Name _____ Score _____ / 6 Teacher _____ Date _____

Average Rate of Change from Tables

Answer Key

Find each average rate of change. Round to the nearest hundredth when needed; halfway values round away from zero.

Table 1

x	f(x)
-5	38.79
-3	38.79
0	38.79
9	38.79
11	38.79
12	38.79

Question 1: Rate from -5 to 9

$$\frac{38.79 - 38.79}{9 - (-5)}$$

$$= 0$$

Table 2

x	f(x)
-11	-54.6
-6	-18.6
0	-1.8
3	-4.2
4	-6.6
6	-13.8

Question 1: Rate from -6 to 0

$$\frac{(-1.8) - (-18.6)}{0 - (-6)}$$

$$= 2.8$$

Table 3

x	f(x)
-12	0.8
-8	0.4
-6	0.2
-1	-0.3
9	0.7
12	1

Question 1: Rate from -12 to 9

$$\frac{0.7 - 0.8}{9 - (-12)}$$

$$= -1/210$$

Approximately 0.00

Table 4

x	f(x)
-8	-0.44
-7	-0.41
1	-0.17
2	-0.14
5	-0.05
8	0.04

Question 1: Rate from 2 to 8

$$\frac{0.04 - (-0.14)}{8 - 2}$$

$$= 0.03$$

Table 5

x	f(x)
-6	-1.5
-5	-1.4
-4	-1.3
1	-0.8
5	-0.4
10	0.1

Question 1: Rate from 10 to 5

$$\frac{(-0.4) - 0.1}{5 - 10}$$

$$= 0.1$$

Table 6

x	f(x)
-12	-17
-2	-0.1
-1	-0.06
1	-0.1
7	3.14
12	16.84

Question 1: Rate from 7 to -12

$$\frac{(-17) - 3.14}{-12 - 7}$$

$$= 1.06$$