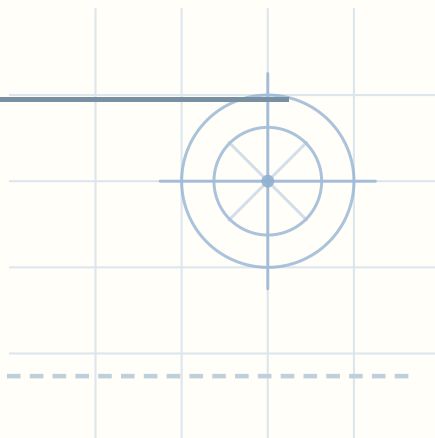


Rate of change — Rate and initial value

Name: _____

Date: _____

Each table is a straight line. Find what each one asks for.



1

x	4	5	6	7
y	20	16	12	8

y at 0 $\rightarrow$ _____

2

x	6	9	12	15
y	98	77	56	35

y at 0 $\rightarrow$ _____

3

x	3	8	13	18
y	43	63	83	103

rate $\rightarrow$ _____

4

x	8	13	18	23
y	43	48	53	58

y at 0 $\rightarrow$ _____

5

x	7	9	11	13
y	9	11	13	15

rate $\rightarrow$ _____

6

x	6	7	8	9
y	44	48	52	56

rate $\rightarrow$ _____

7

x	6	7	8	9
y	95	107	119	131

y at 0 $\rightarrow$ _____

8

x	4	5	6	7
y	23	22	21	20

rate $\rightarrow$ _____



Rate of change · Rate and initial value — Answer key

1. x : 4, 5, 6, 7 y : 20, 16, 12, 8 $\rightarrow$ 36 (at $x = 4$ the value is 20, and stepping back 4 of them at -4 each gives 36)

5. x : 7, 9, 11, 13 y : 9, 11, 13, 15 $\rightarrow$ 1 (y moves 2 while x moves 2, and $2 \div 2 = 1$)

2. x : 6, 9, 12, 15 y : 98, 77, 56, 35 $\rightarrow$ 140 (at $x = 6$ the value is 98, and stepping back 6 of them at -7 each gives 140)

6. x : 6, 7, 8, 9 y : 44, 48, 52, 56 $\rightarrow$ 4 (y moves 4 while x moves 1, and $4 \div 1 = 4$)

3. x : 3, 8, 13, 18 y : 43, 63, 83, 103 $\rightarrow$ 4 (y moves 20 while x moves 5, and $20 \div 5 = 4$)

7. x : 6, 7, 8, 9 y : 95, 107, 119, 131 $\rightarrow$ 23 (at $x = 6$ the value is 95, and stepping back 6 of them at 12 each gives 23)

4. x : 8, 13, 18, 23 y : 43, 48, 53, 58 $\rightarrow$ 35 (at $x = 8$ the value is 43, and stepping back 8 of them at 1 each gives 35)

8. x : 4, 5, 6, 7 y : 23, 22, 21, 20 $\rightarrow$ -1 (y moves -1 while x moves 1, and $-1 \div 1 = -1$)