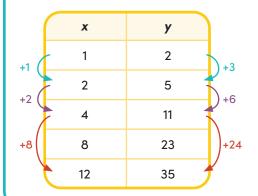
RATE OF CHANGE: TABLES

If you have a table showing a linear function, the rate of change will always be constant. Remember, you can find the rate of change of a linear function, or the slope, using this formula:

Rate of change = $\frac{\text{change in } y}{\text{change in } x}$

Let's try it! Find the rate of change of the linear function in the table below.



$$\frac{3}{1} = 3$$

$$\frac{6}{2} = 3$$

$$\frac{24}{9} = 3$$

You can calculate the rate of change by finding the change in y and change in x between two rows and dividing them.

Since this is a linear function, the rate of change will always be the same, no matter which rows you choose. For this example, the rate of change is always 3.

Practice it! Find the rate of change for the linear function in each table. Then circle the greatest rate of change in each row. All fractions and mixed numbers are written in simplest form.

х	у
1	25
2	50
3	75
4	100

х	у
10	25
11	35
12	45
13	55

х	у
2	8
4	16
6	24
8	32

х	у
8	10
12	20
16	30
20	40

Rate of change =
$$2\frac{1}{2}$$

RATE OF CHANGE: TABLES

Keep going! Find the rate of change for the linear function in each table. Then circle the greatest rate of change in each row. All fractions and mixed numbers are written in simplest form.

х	у
0	15
3	17
6	19
9	21

Rate of change =
$$\frac{\frac{2}{3}}{3}$$

х	у
0	22
5	25
10	28
15	31

Rate of change =
$$\frac{\frac{3}{5}}{5}$$
 Rate of change = $\frac{\frac{5}{8}}{8}$

х	у
0	18
8	23
16	28
24	33

Rate of change =
$$\frac{5}{8}$$

х	у
-2	70
2	82
6	94
8	100

х	у
-5	-21
-4	– 10
-3	1
-2	12

х	у
10	15
30	45
60	90
100	150

Rate of change =
$$\frac{1\frac{1}{2}}{2}$$