Name _____

[06-04-24-T7]

Direct Proportion

■ **The table shows a relationship between x and y.**

[1] Compute $\frac{y}{x}$ and fill in the bottom row of the table.

x	0	1	2	3	4	5
y	0	2	4	6	8	10
$\frac{y}{x}$						

a) Is y directly proportional to x?

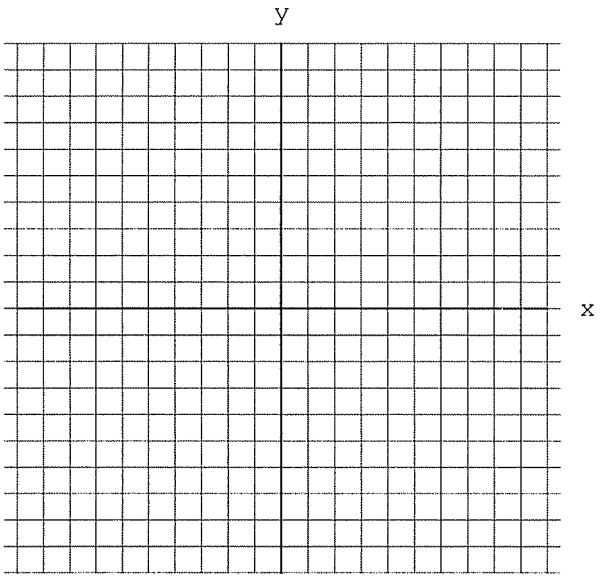
b) What is the constant of proportionality.

c) Write y as a function of x.

d) What is the value of y when $x = 10$?

e) If $-20 < x < 20$, what is the range of the values of y?

f) Graph the function you wrote in (c) above.



■ **The table shows a relationship between x and y.**

[2] Compute $\frac{y}{x}$ and fill in the bottom row of the table.

x	0	1	2	3	4	5
y	0	4	8	12	16	20
$\frac{y}{x}$						

a) Is y directly proportional to x?

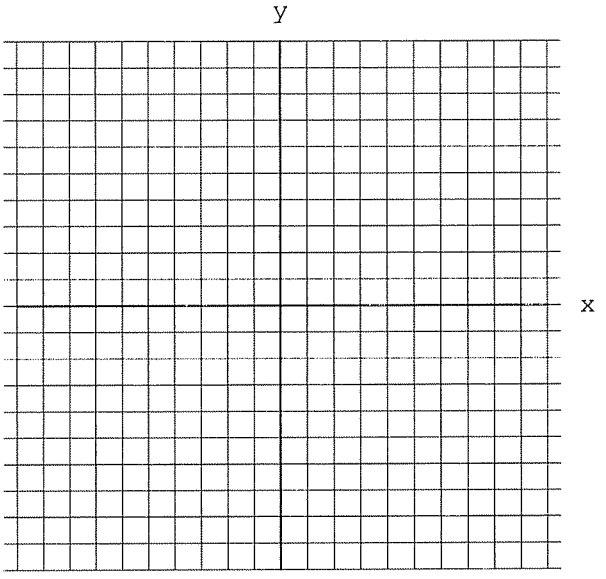
b) What is the constant of proportionality.

c) Write y as a function of x.

d) What is the value of y when $x = 10$?

e) If $-20 < x < 20$, what is the range of the values of y?

f) Graph the function you wrote in (c) above.



■ **The table shows a relationship between x and y.**

[3] Compute $\frac{y}{x}$ and fill in the bottom row of the table.

x	0	1	2	3	4	5
y	0	$\frac{1}{2}$	1	$\frac{3}{2}$	2	$\frac{5}{2}$
$\frac{y}{x}$						

a) Is y directly proportional to x?

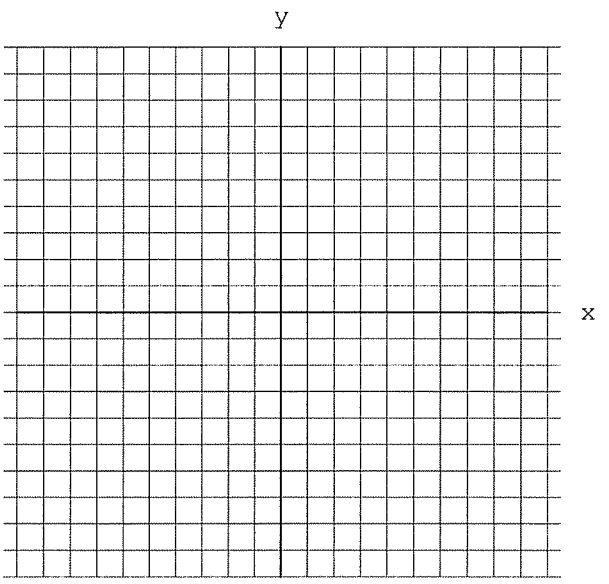
b) What is the constant of proportionality.

c) Write y as a function of x.

d) What is the value of y when $x = 10$?

e) If $-20 < x < 20$, what is the range of the values of y?

f) Graph the function you wrote in (c) above.



■ **The table shows a relationship between x and y.**

[4] Compute $\frac{y}{x}$ and fill in the bottom row of the table.

x	-4	-2	-1	1	2	4
y	-8	-4	-2	2	4	8
$\frac{y}{x}$						

a) Is y directly proportional to x?

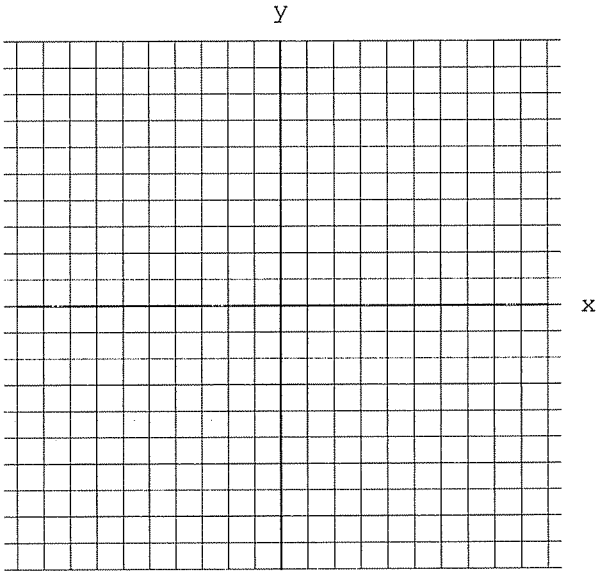
b) What is the constant of proportionality.

c) Write y as a function of x.

d) What is the value of y when $x = 10$?

e) If $-20 < x < 20$, what is the range of the values of y?

f) Graph the function you wrote in (c) above.



■ **The table shows a relationship between x and y.**

[5] Compute $\frac{y}{x}$ and fill in the bottom row of the table.

x	-4	-2	-1	1	2	4
y	8	4	2	-2	-4	-8
$\frac{y}{x}$						

a) Is y directly proportional to x?

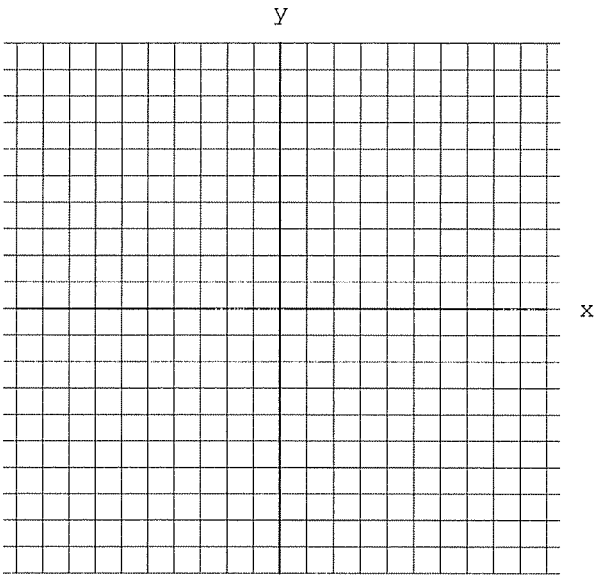
b) What is the constant of proportionality.

c) Write y as a function of x.

d) What is the value of y when $x = 10$?

e) If $-20 < x < 20$, what is the range of the values of y?

f) Graph the function you wrote in (c) above.



■ **The table shows a relationship between x and y.**

[6] Compute $\frac{y}{x}$ and fill in the bottom row of the table.

x	0	2	4	6	8	10
y	0	$\frac{6}{7}$	$\frac{12}{7}$	$\frac{18}{7}$	$\frac{24}{7}$	$\frac{30}{7}$
$\frac{y}{x}$						

a) Is y directly proportional to x?

b) What is the constant of proportionality.

c) Write y as a function of x.

■ **The table shows a relationship between x and y.**

[7] Compute $\frac{y}{x}$ and fill in the bottom row of the table.

x	0	2	4	6	8
y	0	$-\frac{5}{4}$	$-\frac{5}{2}$	$-\frac{15}{4}$	-5
$\frac{y}{x}$					

a) Is y directly proportional to x?

b) What is the constant of proportionality.

c) Write y as a function of x.

■ **The table shows a relationship between x and y.**

[8] Compute $\frac{y}{x}$ and fill in the bottom row of the table.

x	0	2	4	6	8
y	0	-3	-6	-9	-12
$\frac{y}{x}$					

a) Is y directly proportional to x?

b) What is the constant of proportionality.

c) Write y as a function of x.

■ **The table shows a relationship between x and y.**

[9] Compute $\frac{y}{x}$ and fill in the bottom row of the table.

x	-5	-2	1	4	7
y	$\frac{15}{2}$	3	$\frac{-3}{2}$	-6	$-\frac{21}{7}$
$\frac{y}{x}$					

a) Is y directly proportional to x?

b) What is the constant of proportionality.

c) Write y as a function of x.