

# Linear Equation Graphs

## LEARNING OBJECTIVES

In this lesson, I will learn ...

- graph linear equations with two variables by plotting points.
- use the graph to solve real-world problems.



## LET'S GET STARTED



1

### Plotting a graph

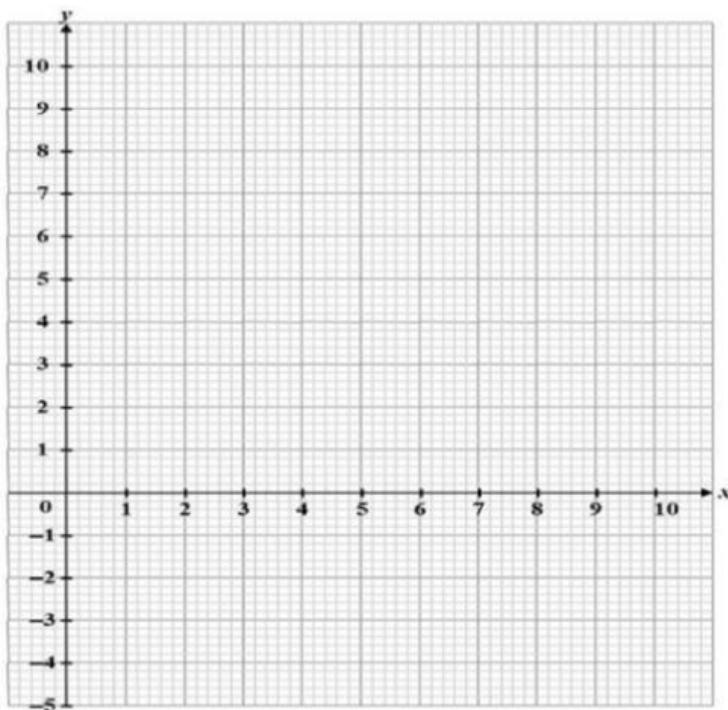
List five pairs of positive numbers that add up to 10. For each pair, call one number  $x$  and the other number  $y$ . Fill the table.

Pair	A	B	C	D	E
x					
y					

## LET'S GET STARTED

2

Plot the points you choose on a set of coordinate axes. Connect the dots



3

What shape is the graph?

4

How many pairs of numbers add up to 10?

5

What does the graph represent?

## DRAW A GRAPH

Let's learn how to draw a graph of linear equation with two variables step by step.  
Draw the graph of the equation  $y = x + 2$

1

Choose three values of  $x$  and find the corresponding values of  $y$ . Set up a table to represent the three ordered pairs.

Fill in the table.

$$y = x + 2$$

x	-2	0	2
y			

2

Choose suitable scales for the  $x$ -axis and  $y$ -axis

3

On the coordinate plane, plot the three points representing the ordered pairs in Step 1. Draw a straight line by its equation.

