

## Chapter 5 Linear Equations In Two Unknowns

### Class Activity 1

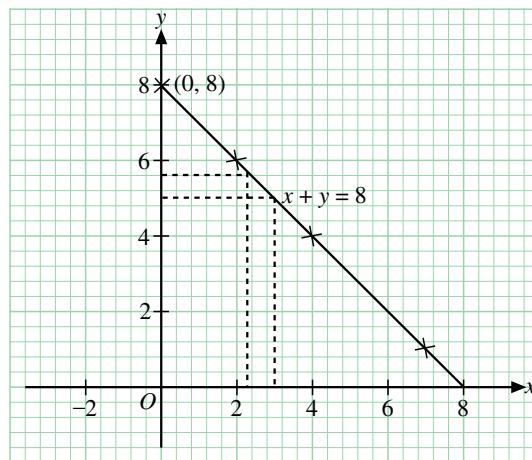
#### Questions

1. Consider the linear equation in two unknowns  $x + y = 8$ .  
 (a) Copy and complete the following table of solutions of the equation.

$$x + y = 8$$

$x$	0	2	4	<b>7</b>
$y$	8	<b>6</b>	<b>4</b>	1

- (b) On a sheet of graph paper, plot the points found in (a) using the scale for both axes as shown below and draw the graph of  $x + y = 8$ .



- (c) Reading from your graph, what is the value of  $k$  if  $(3, k)$  is a solution of  $x + y = 8$ ?

From the graph, the value of  $k$  is 5 if  $(3, k)$  is a solution of  $x + y = 8$ .

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- (d) Reading from your graph, what is the value of  $q$  if  $(2\frac{1}{3}, q)$  is another solution of  $x + y = 8$ ?

From the graph, the value of  $q$  is 5.6 if  $(2\frac{1}{3}, q)$  is a solution of  $x + y = 8$ .

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- (e) What should the exact value of  $q$  be?

$$2\frac{1}{3} + q = 8, q = 5\frac{2}{3}$$


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- (f) Can you read the exact value of  $q$  from your graph?

No, we cannot read the exact value of  $q$  from the graph.

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