



# 2.3 – Linear equations

Student name: \_\_\_\_\_ Score: \_\_\_\_\_

1. (a) One day Zak sold some books at \$5 each. He received a total of \$ $x$ .

Write down, in terms of  $x$ , the number of books he sold.

Answer(a) ..... [1]

- (b) The next day Zak reduced the price of each book to \$4.  
He received \$13 more than on the first day.

(i) Write down, in terms of  $x$ , the number of books he sold on this day.

Answer(b)(i) ..... [1]

(ii) He sold a total of 46 books during the 2 days.

Write down an equation in  $x$  to show this information.

Answer(b)(ii) ..... [1]

(iii) Solve your equation.

Answer(b)(iii)  $x =$  ..... [3]

- (c) Calculate the mean price of a book during these two days.  
Give your answer correct to 2 decimal places.

Answer(c) \$ ..... [2]





# 2.6 – Simultaneous equations

Student name: \_\_\_\_\_ Score: \_\_\_\_\_

1. Solve the simultaneous equations.

$$3x - 4y = 10$$

$$5x - 3y = 2$$

Answer(b)  $x =$  .....

$y =$  ..... [4]

2. Solve the simultaneous equations.

$$5x - 4y = 1$$

$$4x - 5y = 8$$

Answer(b)  $x =$  .....

$y =$  ..... [4]





# 2.3 – Linear equations

## Answers

Student name: \_\_\_\_\_ Score: \_\_\_\_\_

1. (a) One day Zak sold some books at \$5 each. He received a total of \$ $x$ .

Write down, in terms of  $x$ , the number of books he sold.

Answer(a) .....  $\frac{x}{5}$  [1]

- (b) The next day Zak reduced the price of each book to \$4.  
He received \$13 more than on the first day.

- (i) Write down, in terms of  $x$ , the number of books he sold on this day.

Answer(b)(i) .....  $\frac{x + 13}{4}$  [1]

- (ii) He sold a total of 46 books during the 2 days.

Write down an equation in  $x$  to show this information.

Answer(b)(ii) .....  $\frac{x}{5} + \frac{x + 13}{4} = 46$  [1]

- (iii) Solve your equation.

Answer(b)(iii)  $x =$  ..... 95 [3]

- (c) Calculate the mean price of a book during these two days.  
Give your answer correct to 2 decimal places.

Answer(c) \$ ..... 4.41 [2]





# 2.6 – Simultaneous equations

Student name: \_\_\_\_\_ Score: \_\_\_\_\_

1. Solve the simultaneous equations.

$$3x - 4y = 10$$

$$5x - 3y = 2$$

Answer(b)  $x =$            -2          

$y =$            -4           [4]

2. Solve the simultaneous equations.

$$5x - 4y = 1$$

$$4x - 5y = 8$$

Answer(b)  $x =$            -3          

$y =$            -4           [4]

