

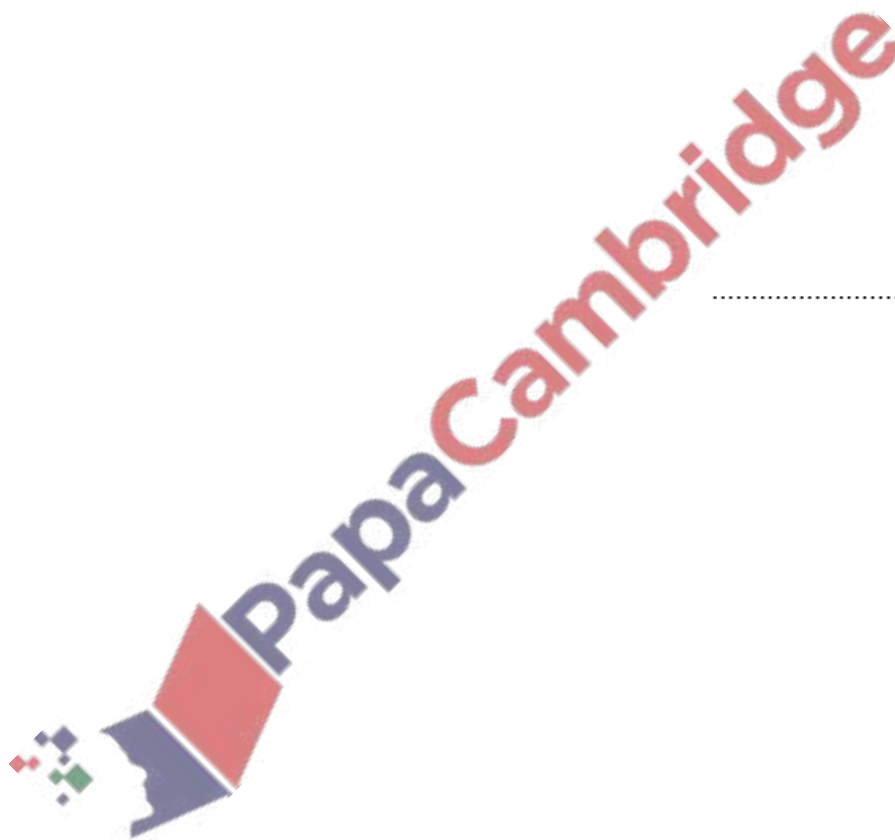
1. **Nov/2020/Paper_11/No.3**

(a) Solve the equation $9 - 5x = 2x - 12$.

$x = \dots\dots\dots$ [2]

(b) Simplify $16 + 2y - 3(3 - y)$.

$\dots\dots\dots$ [2]

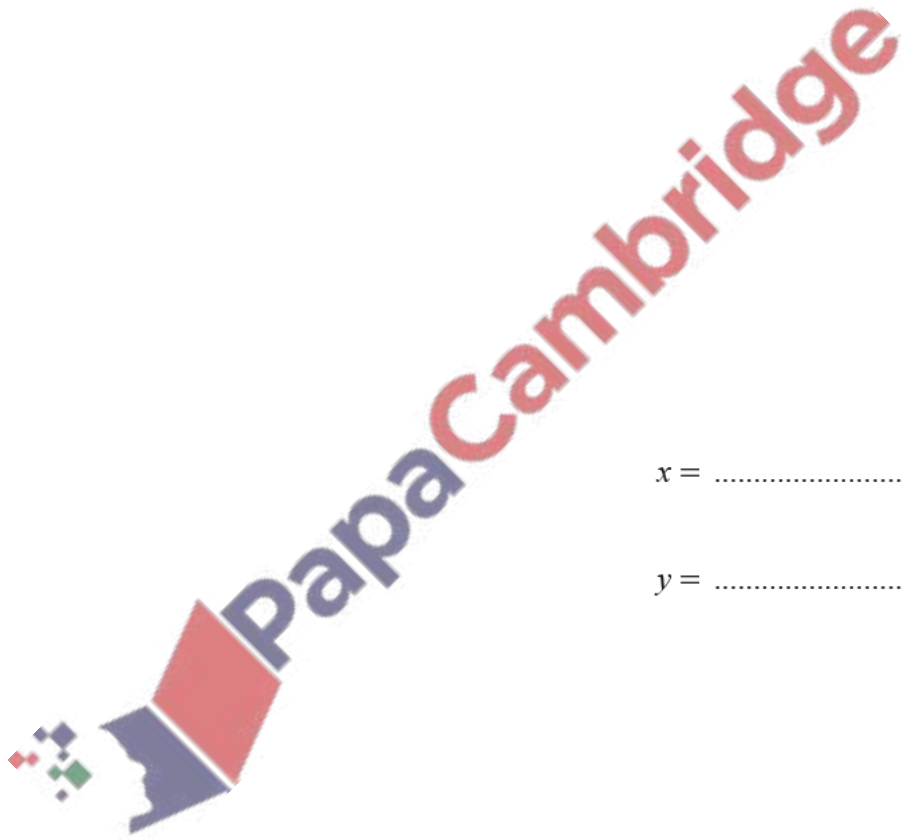


2. Nov/2020/Paper_12/No.10

Solve the simultaneous equations.

$$3x - 2y = 12$$

$$4x + y = 5$$



$x =$

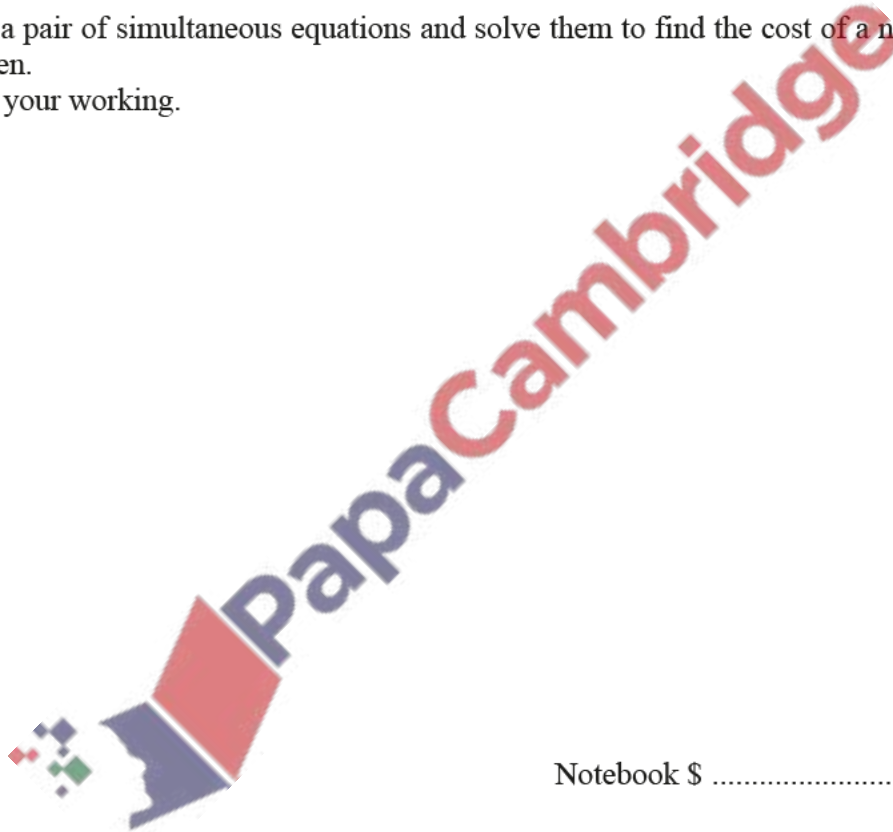
$y =$ [3]

(a) Solve the inequality $6x - 7 > 5 - 2x$.

..... [2]

(b) Chen buys 4 notebooks and 3 pens for \$17.50 .
Liu buys 2 notebooks and 5 pens for \$14.

Form a pair of simultaneous equations and solve them to find the cost of a notebook and the cost of a pen.
Show your working.



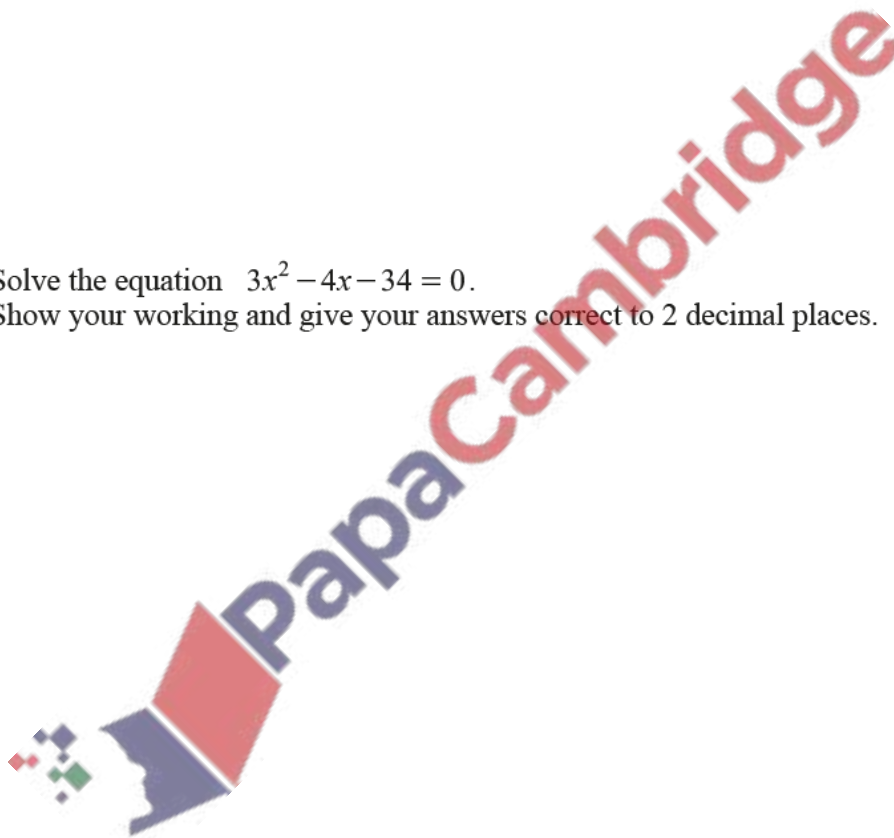
Notebook \$

Pen \$ [4]

(c) (i) Show that $\frac{x}{x+2} - \frac{3}{x-5} = 4$ can be rearranged to $3x^2 - 4x - 34 = 0$.

[3]

(ii) Solve the equation $3x^2 - 4x - 34 = 0$.
Show your working and give your answers correct to 2 decimal places.



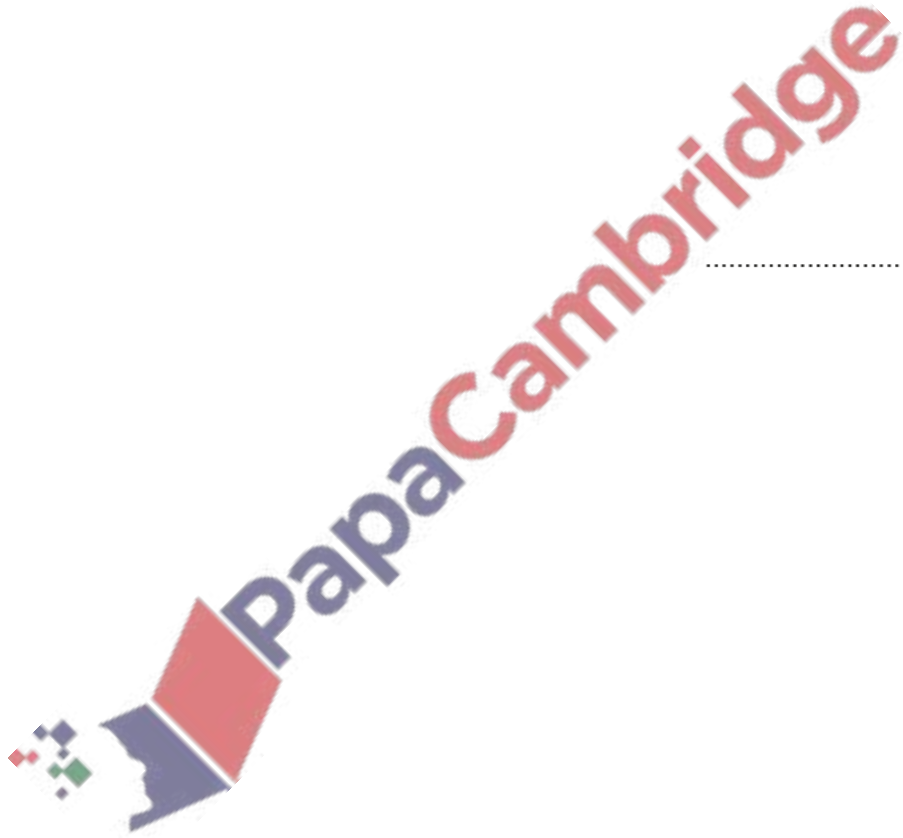
$x = \dots\dots\dots$ or $x = \dots\dots\dots$ [3]

(a) Solve the equation $5 - 2x = 12$.

$x = \dots\dots\dots$ [2]

(b) Find the integers that satisfy $-5 \leq 3x \leq 6$.

$\dots\dots\dots$ [2]



(a) $c = \frac{7-a}{b}$

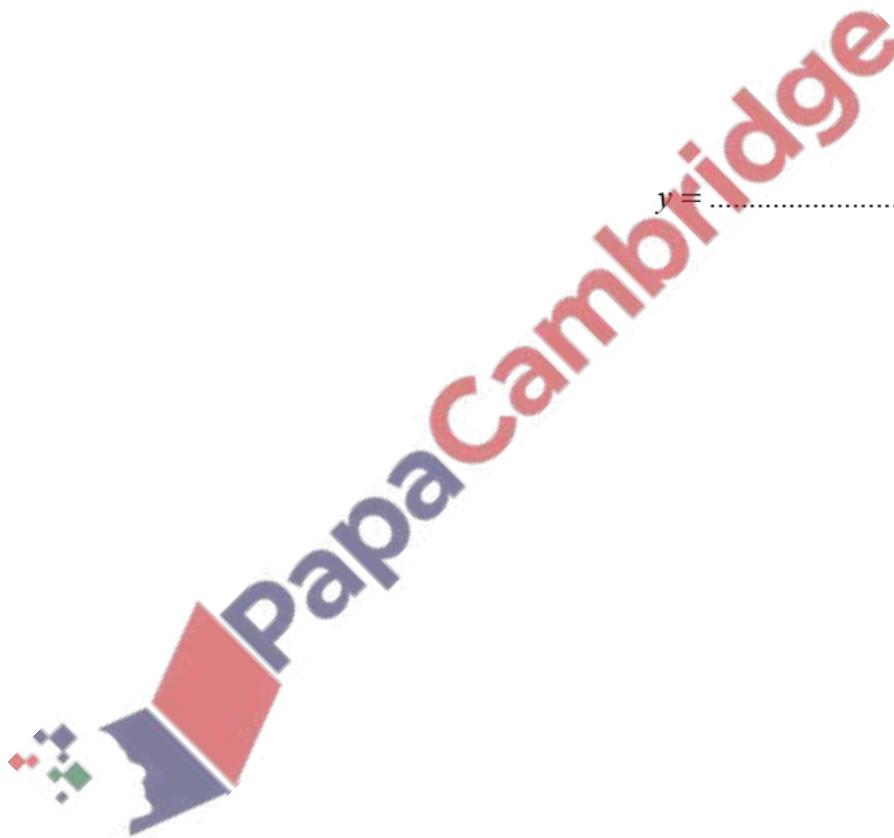
Find c when $a = -4$ and $b = 2$.

$c = \dots\dots\dots [1]$

(b) $y = 5^x + 1$

Find y when $x = -2$.

$y = \dots\dots\dots [1]$



- (b) Solve these simultaneous equations.
Show your working.

$$10x + 7y = -3$$

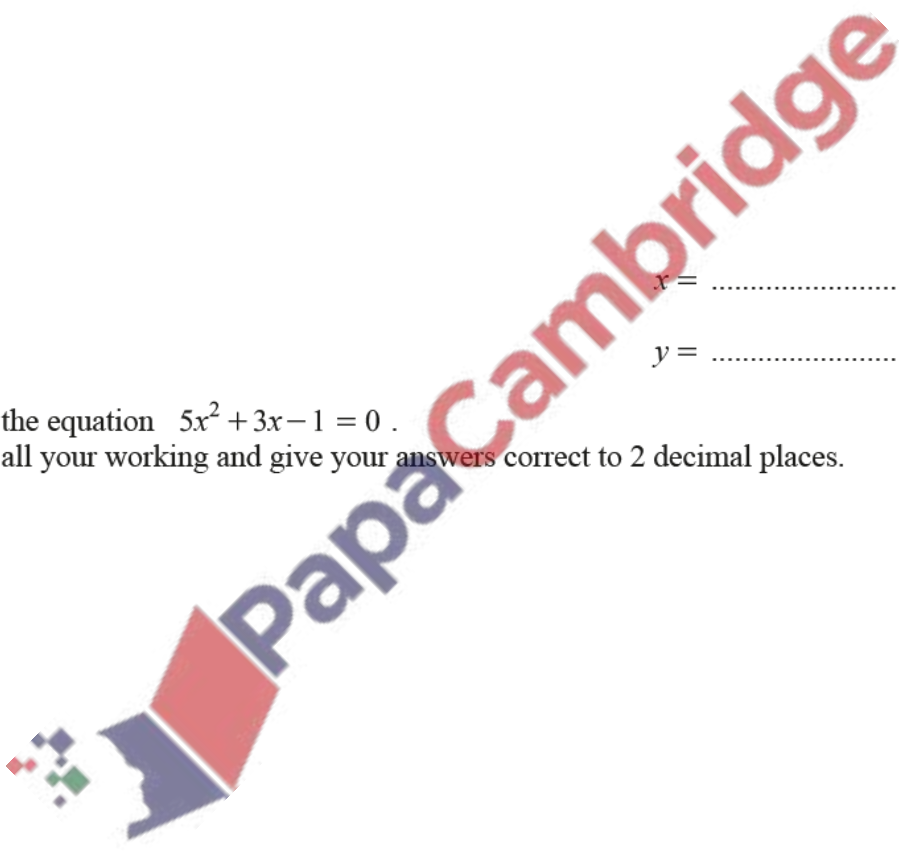
$$5x - y = 3$$

$x = \dots\dots\dots$

$y = \dots\dots\dots$ [3]

- (c) Solve the equation $5x^2 + 3x - 1 = 0$.
Show all your working and give your answers correct to 2 decimal places.

$x = \dots\dots\dots$ or $x = \dots\dots\dots$ [3]



- (a) Solve these simultaneous equations.
Show your working.

$$2x - 4y = 11$$

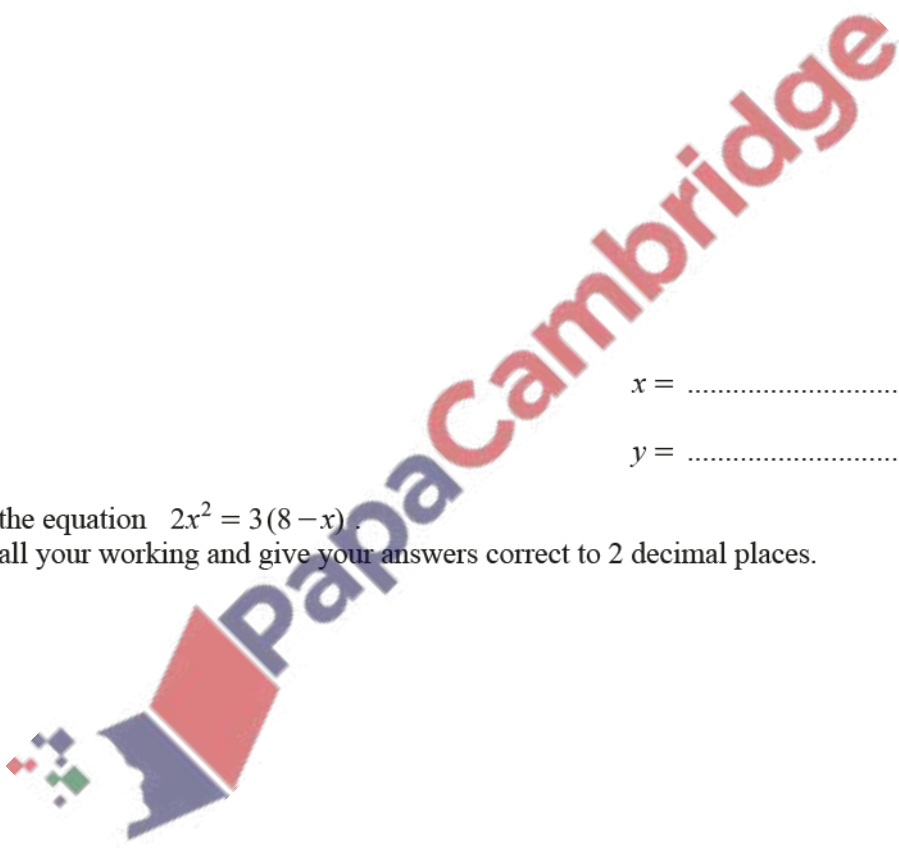
$$3x + 3y = -6$$

$x = \dots\dots\dots$

$y = \dots\dots\dots$ [4]

- (b) Solve the equation $2x^2 = 3(8 - x)$.
Show all your working and give your answers correct to 2 decimal places.

$x = \dots\dots\dots$ or $x = \dots\dots\dots$ [4]



- (c) h is inversely proportional to the cube of g .
 $h = 4.5$ when $g = 2$.

(i) Find the formula for h in terms of g .

$h = \dots\dots\dots$ [2]

(ii) Find the value of g when $h = \frac{32}{3}$.

$g = \dots\dots\dots$ [2]

