## Solutions of equations and inequalities – 2022 O Level Math D

- 1. June/2022/Paper\_12/No.24
  - (a) Solve  $\frac{2-5x}{3x+10} = 3$ .



Papacamoridoe **(b)** Express as a single fraction in its simplest form  $\frac{3}{x-2} - \frac{5}{2x+1}$ .



2.	June/2022/Pa	aper_21/No.8
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- (a) Apples  $\cos \$x$  per kilogram and oranges  $\cos \$y$  per kilogram. The total  $\cos \$f$  of apples and  $10 \lg \ g$  of oranges is \$40.
  - (i) Show that x+2y=8.

[1]

(ii) The total cost of 4kg of apples and 3kg of oranges is \$19.

Use simultaneous equations to find the cost of 1 kilogram of apples and of 1 kilogram of oranges.

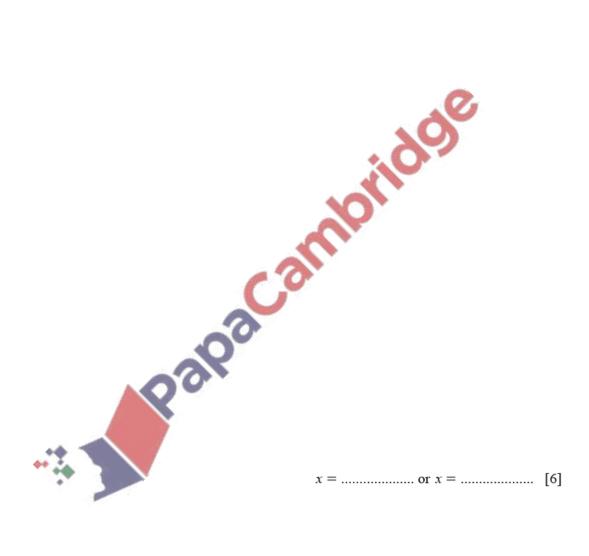
Show	your	working
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		Apples \$	
(b)	Solve $-8 < 4(x-3) < 7$ .	Oranges \$	[4]

.....[3]

(c) Solve  $\frac{4}{x-1} + \frac{2}{2x+3} = 1$ .

Show all your working and give your answers correct to 2 decimal places.



June/2022/Paper\_22/No.2

(a) A = 3p + q

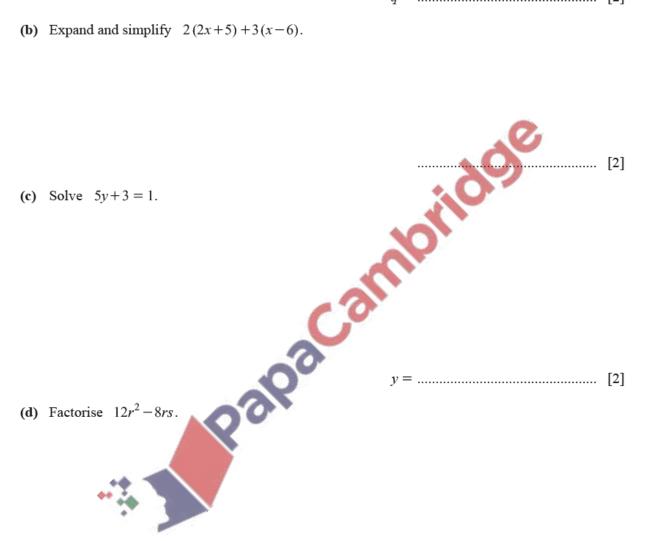
Find q when A = 23 and p = 5.

$$q = .....$$
 [2]

**(b)** Expand and simplify 2(2x+5)+3(x-6).



(c) Solve 5y + 3 = 1.



..... [2]

(e) Rearrange a = 3b to make b the subject.

.....[1]