

A14-A15...Equations with Two Unknowns

OCR

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(b) Solve.

$$5x - 6 = 3x + 13$$

(b) $x = \dots\dots\dots$ **[3]**

(b) Solve.

$$5x - 6 = 3x + 13$$

$$5x - 6 = 3x + 13$$

$$5x - 3x = 13 + 6$$

$$2x = 19$$

$$x = 9.5$$

$$5x - 6 = 3x + 13$$

$$5x = 3x + 19$$

$$2x = 19$$

$$x = 9.5$$

9.5

(b) $x = \dots\dots\dots 9.5 \dots\dots\dots$ [3]

(b) $3(2x + d) + c(x + 5) = 10x + 17$

A10

A14/15

Work out the value of c and the value of d .

(b) $c = \dots\dots\dots$

$d = \dots\dots\dots$ **[5]**

$$(b) \quad 3(2x+d) + c(x+5) = 10x + 17$$

A10

A14/15

Work out the value of c and the value of d .

$$6x + 3d + cx + 5c = 10x + 17$$

$$6x + cx = 10x$$

$$\underline{c = 4}$$

$$6x + 4x = 10x$$

$$3d = -3$$

$$d = -1$$

$$c = 4$$

$$3d + 5c = 17$$

$$3d + 20 = 17$$

$$\boxed{-3} + 20 = 17$$

$$(b) \quad c = \dots\dots\dots 4 \dots\dots\dots$$

$$d = \dots\dots\dots -1 \dots\dots\dots [5]$$

10 (a) Solve the inequality.

$$3x - 2 > 10$$

(a) [2]

(b) Solve.

$$6x + 2 = 5 - 4x$$

(b) $x =$ [3]

10 (a) Solve the inequality.

A19 $3x - 2 > 10$

$$3x - 2 > 10$$

$$3x > 12$$

$$x > \frac{12}{3}$$

$$x > 4$$

(a) $x > 4$ [2]

(b) Solve.

A14/15 $6x + 2 = 5 - 4x$

$$6x + 4x = 5 - 2$$

$$10x = 3$$

$$x = \frac{3}{10}$$

(b) $x = \frac{3}{10}$ or 0.3 [3]

Edexcel

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16 Solve $5x - 6 = 3(x - 1)$

$x =$

(Total for Question 16 is 3 marks)

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16 Solve $5x - 6 = 3(x - 1)$

$$5x - 6 = 3x - 3$$

$$5x - 3x = -3 + 6$$

$$2x = 3$$

$$x = \frac{3}{2} \text{ or } 1\frac{1}{2} \text{ or } 1.5 \quad x = 1\frac{1}{2}$$

(Total for Question 16 is 3 marks)

25 Solve $\frac{5-x}{2} = 2x-7$

A14
A15

$x = \dots\dots\dots$

(Total for Question 25 is 3 marks)

25 Solve $\frac{5-x}{2} = 2x-7$

A14
A15

$$5-x = 2(2x-7)$$

$$5-x = 4x-14$$

$$5+14 = 4x+x$$

$$19 = 5x$$

$$\frac{19}{5} = x$$

$$x = \frac{19}{5} = 3.8 \checkmark$$

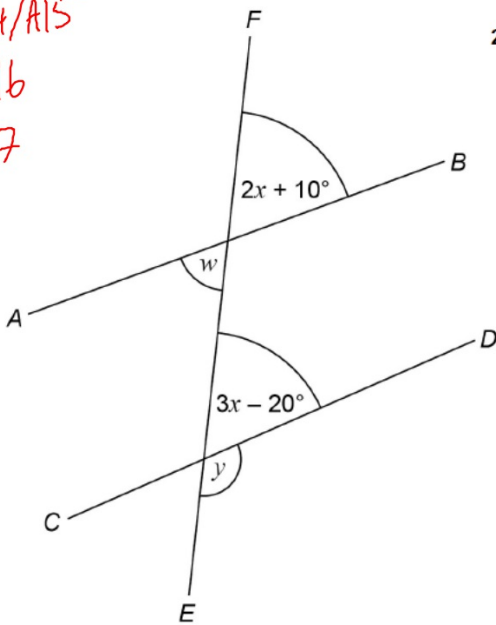
(Total for Question is 3 marks)

AQA

24 AB , CD and EF are straight lines.

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A14/A15
A16
G7



24 (a) Ava assumes that AB and CD are parallel.

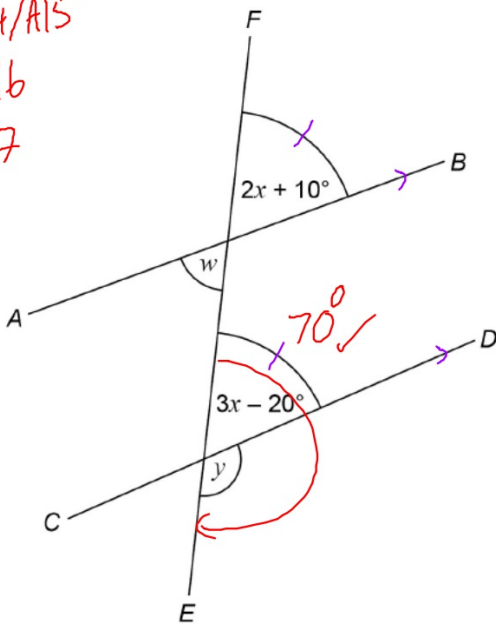
What answer should she get for the size of angle y ? [4 marks]

Answer _____ degrees

AB, CD and EF are straight lines.

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- (a) Ava assumes that AB and CD are parallel.

What answer should she get for the size of angle y ? [4 marks]

$$2x + 10 = 3x - 20$$

$$10 + 20 = 3x - 2x$$

$$30 = 1x$$

$$30 = x$$

$$x = 30$$

$$3x - 20$$

$$90 - 20$$

$$= 70^\circ$$

$$180^\circ - 70^\circ =$$

Answer 110 degrees

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27 Solve $4(3x - 2) = 2x - 5$

[3 marks]

A14-15

$x =$ _____

Solve

$$4(3x - 2) = 2x - 5$$

[3 marks]

A14-15

$$12x - 8 = 2x - 5$$

$$12x - 2x = -5 + 8$$

$$10x = +3$$

$$x = \frac{3}{10} = 0.3$$

$$x = \underline{0.3} \checkmark$$