

m7 = 2 days to go!

2 Given $2^5 = 1 + 2^2 + 3^n$

Find the value of n .

$$2^5 = 2 \times 2 \times 2 \times 2 \times 2$$

$$= 32$$

$$1 + 2^2 + 3^n$$

$$1 + 4 + (27)$$

$$3^n = 27$$

Answer $n = \underline{3}$ [4]

5 Matthew changes £500 into euro.

The exchange rate is £1 = 1.23 euro.

Matthew spends 480 euro on his holiday. He changes the remainder of his euro into pounds (£) when he gets home.

The exchange rate is now £1 = 1.18 euro.

How much, in pounds, does he get?

£	1.23	€
500		615
	x 1.23	

spends €480 so has €135 remaining.

so	£	€
	1	: 1.18
	x 1.18	
	1.18	135

Answer $\underline{\hspace{2cm}}$ [4]

$$\underline{\pounds 114.41}$$

On the grid, clearly indicate the region that satisfies all these inequalities.

$$y < x$$

$$y \geq 1$$

$$x + y \leq 4$$

Draw each line
Then could use a

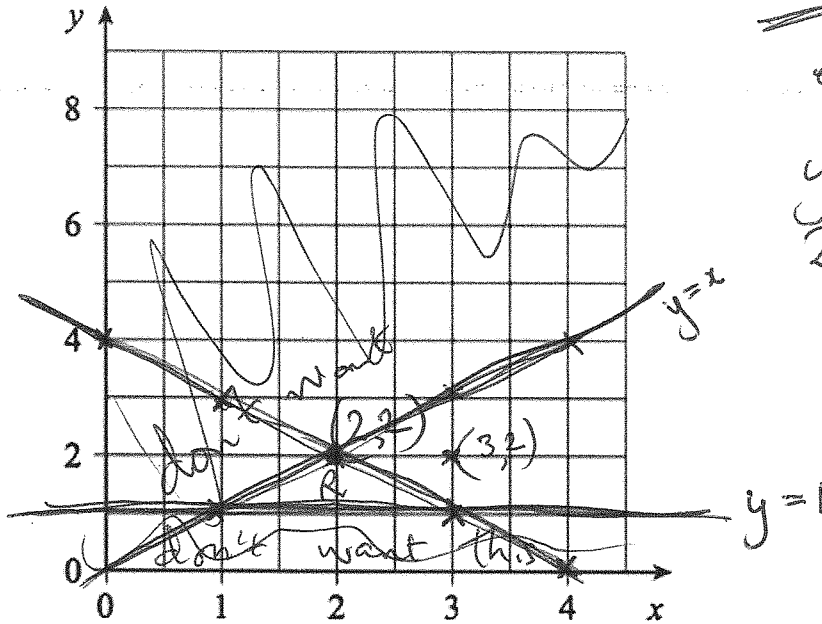
TEST POINT

eg $(2, 2)$

$$y \geq 1$$

$$2 \geq 1 \text{ Yes}$$

$$x + y = 4$$



$$y = x$$

Test point

$$(3, 2)$$

$$x = 3 \quad y = 2$$

$$y \leq x$$

$$2 \leq 3 \text{ Yes}$$

$$x + y = 4$$

Test point $(1, 1)$

$$x + y \leq 4$$

$$1 + 1 \leq 4$$

$$2 \leq 4 \text{ Yes}$$

(3)

8.

(a) Write five million in standard form.



5000000

$$5.0 \times 10^6$$

(1)

(b) Write three hundred thousand in standard form.

300000

$$3.0 \times 10^5$$

(1)