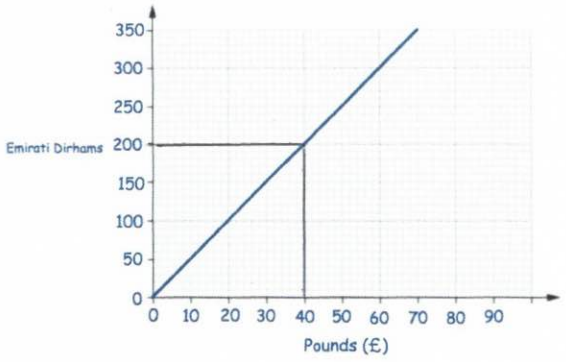
29th March

Corbettmaths



Convert 2200 Emirati Dirhams into Pounds.

200 Dirhams = £40

2200 Dirhams = £440

Tom wants to buy a camera.
In London the camera costs £380.
In Abu Dhabi the camera costs 2000 Dirhams. £400

In which city is the camera cheaper and by how much?
Give your answer in pounds.

London by £20

Lee completes a journey in three stages.
In stage 1 of his journey, he drives at an average speed of 30km/h for 45 minutes.

How far does Lee travel in stage 1 of his journey?

$d = s \times t$

$d = 30 \times 0.75$

$= 22.5$ km

In stage 2 of his journey, Lee drives at an average speed of 50km/h for 2 hours 48 minutes. $d = 50 \times 2.8 = 140$ km

Altogether, over all three stages, Lee drives 200 km in 4 hours.

$200 - (140) - (22.5) = 37.5$

What is his average speed, in km/h, in stage 3 of his journey?

2hr 48min 45min = 3hr 33min

stage 3 lasts 27 mins

$s = \frac{37.5}{0.45} = 83.\dot{3}$ km/h

Solve the simultaneous equations

(1) $3x - 4y = 18$ $\times 5$

(2) $2x - 5y = 19$ $\times 4$

$15x - 20y = 90$

$8x - 20y = 76$ subtract

$7x = 14$

$x = 2$

Sub $x=2$ into (1)

$6 - 4y = 18$

$-4y = 12$

$y = -3$

check in (2)

$4 - -15 = 19$ ✓