Name: _____ 5-a-day Higher

7th March

Corbettmaths

A car travels 200 miles to the nearest 10 miles.
It travels for 4 hours to the nearest hour.

Calculate the greatest possible average speed.

max speed = max distance / min time

= 205 / 3.5

= 58.5714 mph

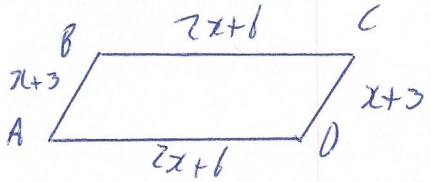
ABCD is a parallelogram.
AB is (x + 3)cm

BC is twice the length of AB.

The perimeter of the parallelogram is 80cm.

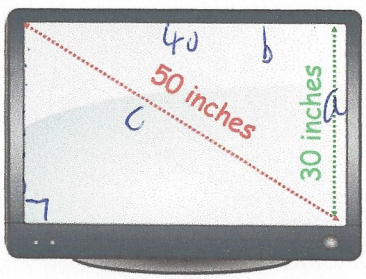
BC = 26.666... cm

Find the length of BC.



6x + 18 = 80

x = 10 1/3 (or 10.333...)



Area = 30 x 40 = 1200 square inches

Find the area of the TV screen shown.

$a^2 + b^2 = c^2$

$30^2 + b^2 = 50^2$

$900 + b^2 = 2500$

$b^2 = 1600$

$b = 40$

Factorise $6w^2 - 11w - 10$

(2w - 5)(3w + 2)

The length of a rectangle is increased by 20%. 1.2
The width of the rectangle is increased by 30%. 1.3

Work out the percentage increase in area.

1.2 x 1.3 = 1.56

56% increase