



18th March

Make m the subject

$$m(r + p) = r(h - m)$$

$$mr + pm = rh - mr$$

$$mr + pm + mr = hr$$

$$2mr + pm = hr$$

$$m(2r + p) = hr$$

$$m = \frac{hr}{2r + p}$$

MTW

400

MTW

160

MTF

240

MTW

320

MWF

480

MTF

192

TWTR

200

TWTF

300

TWTF

120

WTRF

240

A gym runs many exercise classes.  
 Monday: 8 different classes  
 Tuesday: 5 different classes  
 Wednesday: 10 different classes  
 Thursday: 4 different classes  
 Friday: 6 different classes.

Shea goes one exercise class on 3 different days.

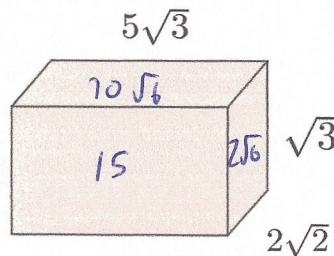
How many different possible combinations are there?

2652

Shown is a cuboid with measurements in centimetres.  
 Work out the surface area

$$(15 + 12\sqrt{6}) \times 2$$

$$= 30 + 24\sqrt{6} \text{ cm}^2$$



Solve

$$\frac{2}{2x-1} + \frac{1}{x-2} = 1$$

$$\frac{2(x-2) + 2x-1}{(2x-1)(x-2)} = 1$$

$$2x-4 + 2x-1 = (2x-1)(x-2)$$

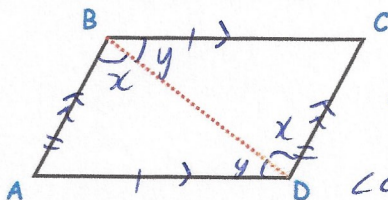
$$4x-5 = 2x^2 - 4x - 2 + 2$$

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

$$0 = 2x^2 - 9x + 7$$

$$0 = (2x-7)(x-1)$$

$$x = \frac{7}{2} \text{ or } x=1$$



$\angle ABD = \angle CBD =$   
 alternate  
 $\angle CBD = \angle BDA$   
 alternate  
 BD is shared

ABCD is a parallelogram.

Prove that triangles ABD and BCD are congruent.

ASA