

**15th June**

Corbettmaths

Solve  $3x^2 - 23x - 67 = 0$

Give your answers to 1 decimal place.

Make  $w$  the subject of

$$\sqrt{\frac{4aw}{a+w}} = 8$$

The line  $L$  has equation

$$5x - 4y + 30 = 0$$

The line  $L$  intersects the  $x$ -axis at the point  $A$ . The line  $L$  intersects the  $y$ -axis at the point  $B$ .

Find the distance between the points  $A$  and  $B$ .

Work out the matrix that transforms the unit square by a reflection in line  $y = x$