



Factorise fully.

$$36a^2 - 4y^2$$

$$4(9a^2 - y^2)$$

$$4(3a+y)(3a-y)$$

In a store room, the number of

$$\text{black pens : blue pens : red pens} \\ = \underline{11} : \underline{15} : \underline{3}$$

There are 1008 more black pens than red pens.

Work out the number of blue pens in the storeroom.

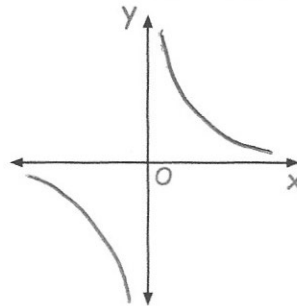
$$11 - 3 = 8$$

$$1008 \div 8 = 126$$

$$126 \times 15 = 1890$$

Sketch

$$y = \frac{4}{x}$$



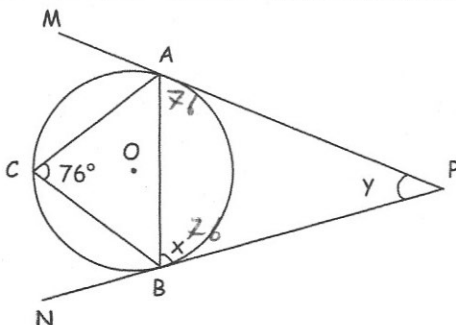
An online retailer normally sells clothes at 70% more than the cost price.
In a sale the price of all clothes are reduced until they are only 2% more than the cost price.

$$170 \times \boxed{y} = 102$$

By what percentage of the original selling price have the price of the clothes been reduced?

$$y = 0.6$$

40% reduction

Find x and y

$$x = 76^\circ$$

$$180 - 76 - 76 = 28^\circ$$

$$y = 28^\circ$$