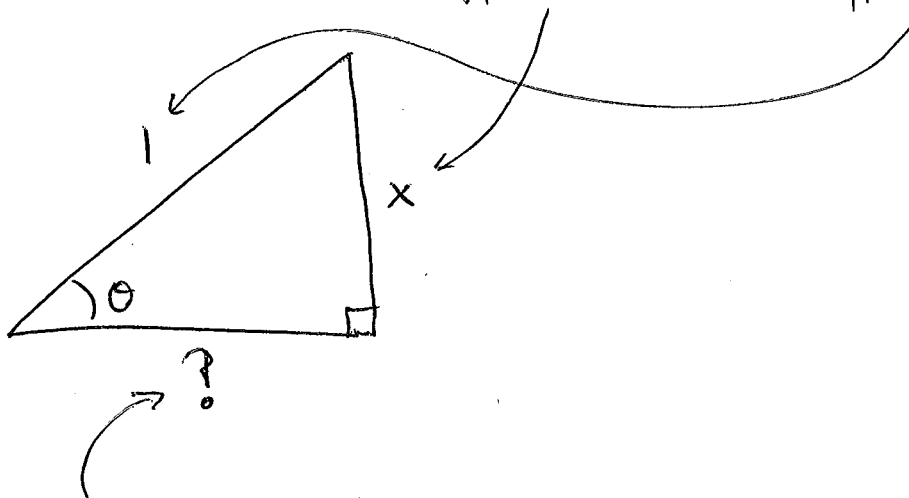① a) $x = \sin\theta = \dfrac{\text{opposite}}{\text{hypotnuse}}$
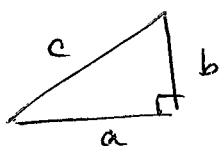
so we need to draw a triangle so $\dfrac{\text{opposite}}{\text{hypotnuse}} = x$

easiest way: $\dfrac{\text{opposite}}{\text{hypotnuse}} = \dfrac{x}{1}$

So   opposite $= x$ and   hypotnuse $= 1$

this leg can be found using the Pythagorean Thm:

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

So

Solution to (a)

Now, using this triangle

(b) $\sin\theta = \dfrac{\text{opp}}{\text{hyp}} = \dfrac{x}{1} = x$

(c) $\cos\theta = \dfrac{\text{adjacent}}{\text{hypotnuse}} = \dfrac{\sqrt{1-x^2}}{1} = \sqrt{1-x^2}$

(d) $\tan\theta = \dfrac{\text{opposite}}{\text{adjacent}} = \dfrac{x}{\sqrt{1-x^2}}$