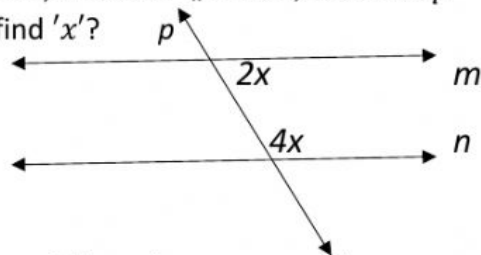Continue from Unit test – part 1

2. In the figure given below, if $line\ m\ \|\ line\ n, and\ line\ p$ is a transversal, then find $'x'$?



Here,   $line\ m\ \|\ line\ n, and\ line\ p$ is a transversal

And given angles '*2x*' and '*4x*' are interior angles.

∴  $by\ property\ of\ interior\ angles,$

$2x + 4x = 180^0$

∴ $6x = 180^0$

∴ $x =$

∴ $x =$

3. Find the cube of 0.03.

$(0.03)^3 =$                          (Multiplication form)

$(0.03)^3 =$                          (Answer)

Q.4    Solve the following questions.                          6

1. In the figure given below, $line\ a\ \|\ line\ b, and\ line\ l$ is a transversal, find the measures of ∠x, ∠y and ∠z using the given information.

i)   $\angle x = ?$
  a) $95^0$         b) $85^0$         c) $100^0$         d) $180^0$

ii)   $\angle y = ?$
  a) $95^0$         b) $85^0$         c) $100^0$         d) $180^0$
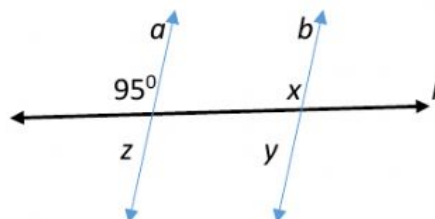
iii)   $\angle z = ?$
  a) $95^0$         b) $85^0$         c) $100^0$         d) $180^0$

2. The number $\sqrt{2}$ is shown on a number line. Steps are given to show $\sqrt{3}$ on the number line using $\sqrt{2}$. Fill in the boxes properly and complete the activity.

Activity :

1.  The point Q on the number line shows the number $\sqrt{2}$
2.  A line perpendicular to the number Line is drawn through the point Q. Point R is at unit distance from Q on the line.
3.  Right angled $\triangle\ ORQ$ is obtained by drawing seg OR.
4.  $l(OQ) = \sqrt{2}, l(QR) = 1$
    $\therefore$  by Pythogorus theorem,

$$[l(OR)]^2 = [l(OQ)]^2 + [l(QR)]^2$$
$$= (\sqrt{2})^2 + (1)^2$$
$$= \qquad +$$
$$= \qquad\qquad\qquad \therefore l(OR) = \sqrt{3}$$
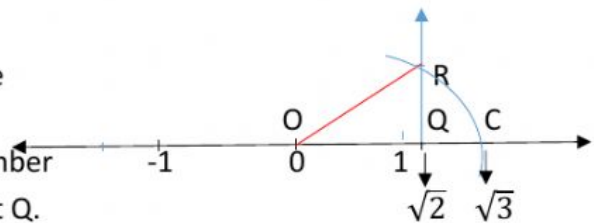
Draw on arc with center O and radius OR. Mark the point of intersection of the line and the arc as C. The point C shows the number$\sqrt{3}$.