6. Using a ruler and pair of compass only. Sketch the following conic sections
   (a) A parabola represented by the equation $y = 12x$

   (b) A hyperbola represented by the equation $\dfrac{x^2}{9} - \dfrac{y^2}{16} = 1$

   (c) An eclipse given by the equation $\dfrac{x^2}{25} - \dfrac{y^2}{9} = 1$

7. (a) Draw
      (i) the locus of a point equidistant from the points X and Y.
      (iii) the locus of points closer to X than Y but no less than 5 cm from X.
   (b) A goat is on a rope tethered to a post in the corner of a rectangular garden. The rope is 5 m long. Show the area that the goat is free to eat its grass.

END