

2nd way:

Triangle ABC is isosceles at B (given)

Then, bisector of \widehat{ABC} , (d) is a median issued relative to [AC]. (From main vertex of iso. Δ)

So, (d) passes through midpt of [AC]

$$\left. \begin{aligned} x_{\text{mid}} &= \frac{x_A + x_C}{2} = 1 \\ y_{\text{mid}} &= \frac{y_A + y_C}{2} = 3 \end{aligned} \right\} \text{Mid}(1, 3)$$

(d) is issued From B (3, 3)

we notice that B & midpt have same ordinate

Then (d) is parallel to x-axis

$$(d): y = \text{cst}$$

Thus, $(d) \quad y = 3$

3a)

Perim = 20m.

let w be width of rectangle

and, $p = 2(l + w)$

then $20 = 2(l + w)$

So, $l + w = 10$

hence, $w = 10 - l$

Now, Area \leq length \times width

Thus, $A = l(10 - l)$ units square

$$A = l(10 - l)$$

$$A = -l^2 + 10l$$

A function is linear if it can be written in form

of $y = ax$.

$\&$ $A = -l^2 + 10l$ is not in this form

Thus A is not a linear fn of l