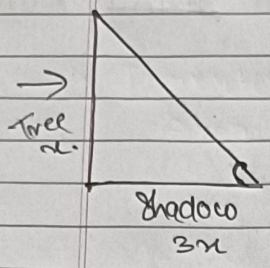
10) Find the angle of Elevation of the Sun when the length of the shadow of a tree is 3 times then the tree



1) formula :- 1) Area of a square = a^2
(2) perimeter of Square = $4a$

3) Area of a rectangle with the side's A and B
perimeter of a Rectangle = $2(a+b)$

1) Find the perimeter and Area of a Square with length 2.5 meters

$a^2 = (2.5)^2 = 6.25$ Square meter
$= 4a = 4 \times 2.5 = 10$ Meter.

2) Find the length of the ~~Square~~ side of the Square if the perimeter = 558.2

Perimeter = 558.2 M
$4a = 558.2$
$\Rightarrow a = \frac{558.2}{4}$
$= 139.55$ M.

3) The perimeter of a Rectangle is 230 cm if the length is 70 cm, Find Breadth.

→ $2(a+b) = 230$

$2(70+b) = 230$

$70+b = \frac{230}{2} = 115$

$\Rightarrow B = 115 - 70$

$\Rightarrow 45$ cm.

4) Area of a Rectangle this 96 cm^2 if the Breadth is 8 cm Find the length of the Rectangle

→ $ab = 96$

$a \times 8 = 96$

$a = \frac{96}{8} = 12$ cm

5) Find the cost of tiling of a Rectangle who's length is ~~150~~ M Breadth is 150 M at the Rate of 300 Rs. 56 per Square meter.

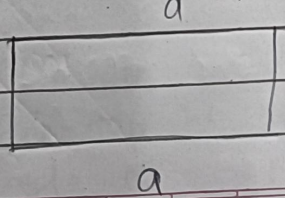
$ab = 300 \times 150$

Area = 45000 Sq M

1 Sq M → Rs 56

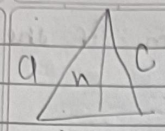
45000 × 56

= 25,20,000



Rectangle area => ab

perimeter = 2(a+b)

b) 

Area = $\frac{1}{2}$ × base × height

per = a + b + c

4, 5, 3 m and Heights is 5m.

Perimeter = = 12 m

Area = $\frac{1}{2}$ × 5 × 5 m^2

= 12.5

7) The length of a Rectangular wooden Board is thrice of its width if the width is 120 cm Find the cost of making the Board at ₹ 5 per sqv are meter

→ width = b = 120 cm

length = a = 3 × 120 cm = 360 cm

Area = ab = 360 × 120

= ~~43200~~ square meter (M^2)

43200

8) Find the perimeter of a Square who's area is 625 cm^2

→ Area = 625 cm^2

a^2 = 625

⇒ a = $\sqrt{625}$ = 25

perimeter = 4a = 4 × 25

= 100 cm

a) The area of Square and Rectangle are Equal if the side of a square is 20 cm and the Breath of a Rectangle is 10 cm find the length of the Rectangle

→ Area of Rectangle = $ab = 10a$
Area of a square = $20^2 = 400$

$10a = 400$

$a = \frac{400}{10} = 40$ cm

b) The Area of a trangle with Base of 10 cm is 45 square cm find the Height of the trangle

→ $\frac{1}{2} \times$ base $\times$ height $= 45$

⇒ $\frac{1}{2} 10 \times$ height $= 45$

⇒ height $= \frac{2 \times 45}{10} = 9$

✱ if the perimeter of a field of length of 100 M is 400 M Find the Breath of the field

perimeter $= 2(a+b) = 400$

$\Rightarrow 2 \cdot (100+b) = 400$

$\Rightarrow b = 200 \div 400 = 2.$

2) From a point 300 M far from foot of a pole the top of the pole is observed at an angle of elevation of 30 What is the Height of the Pole

→ $\tan 30° = \frac{1}{\sqrt{3}}$

$\frac{x}{300} = \frac{1}{\sqrt{3}}$

$\frac{x}{300} = \frac{1}{\sqrt{3}}$

$\Rightarrow x = \frac{300}{\sqrt{3}}$

$= \frac{300}{1.73} = 173.4$

2) Mr. x completes a work in 10 Days Mr. y completes a work in 15 Days if Both of them work together in how Many Days they will Complete the work.

→ In one day x and y work $= \frac{1}{10}$

In one day y work $= \frac{1}{15}$

In one days x and y combinedly work

$= \frac{1}{10} + \frac{1}{15}$ $\quad \frac{10+5}{150}$ $\quad \frac{25}{150}$ 6

$= \frac{1}{6}$

3) Side of a Square is 8M find the Area of a Perimeter.

4) Mr. X and y together can do a work in 6 Days If x takes 8 days Alone TO Complete the work How many days y will alone complete the work.

→ in one day Both of them Combinedly work
in one day x. work $= \frac{1}{6}$
in one day y work $= \frac{1}{8}$

$$y = \frac{1}{6} - \frac{1}{8}$$

$$= \frac{8-6}{48} = \frac{2}{48} = \frac{1}{24}$$

5) A and B Together takes 3 days To complete the work. B alone takes 5 days How many days A will take TO complete the work.

→ $A + B = \frac{1}{3}$

$$B = \frac{1}{5}$$

$$A = \frac{1}{3} - \frac{1}{5} \quad = \frac{3-5}{15} \quad = \frac{2}{15} = 7.5$$

6) Area of a Rectangle is 3600 Square M Br. of the Breath is 45 M find The length

→ $x \times$ Breath $= 3600$

$$x \times 45 = 3600$$

$$x = \frac{3600}{45}$$

$$= 80$$

2) The area of a Rectangle is 6000 Square M The Ra of length and Breadth of an Rectangle 2:3 Find the length and the Bre th.

→ The length and Breadth are 2x and 3x

$2x \times 3x = 6000$

$\Rightarrow 6x^2 = 6000$

$\Rightarrow x^2 = 1000$

$\Rightarrow x = \sqrt{1000}$

$x = 31.62$

length $= 63.24$

Breadth $= 94.86$

8) How many square tiles of side 9 cm will be needed to fit a square floor of 720 cm.

→ Number of tiles = Total Area of a floor / Area of 1 tile Divided

$$\frac{720 \times 720}{9 \times 9} = \frac{518\,400}{81}$$

$= 6400$

9) There is a Rectangular floor with length 50 M Breadth. 25 M The floor is covered by tile's that each tile is a Square

a side is