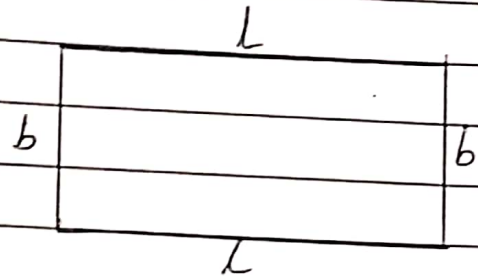


Ch: 27 Perimeter, area and Volume. Date: 17/03/2020

Rectangle

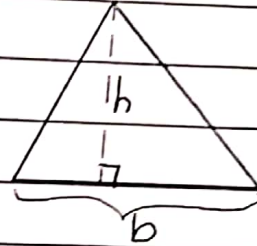
$$\text{Perimeter} = 2(l+b)$$

$$\text{Area} = lb$$



Triangle

$$\text{Area} = \frac{1}{2}bh$$



Ex: 27.1

$$\begin{aligned} 1a \quad A &= \frac{1}{2}bh & b=4\text{cm}, h=3\text{cm} \\ &= \frac{1}{2} \times 4 \times 3 \\ &= 6 \text{ cm}^2 \end{aligned}$$

Solve c, e.

$$\begin{aligned} 2a) \text{ Area of one triangle} &= \frac{1}{2}bh & b=8\text{cm}, h=4\text{cm} \\ &= \frac{1}{2} \times 8 \times 4 \\ &= 16 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \text{Area of the shape} &= 4 \times 16 \text{ cm}^2 \\ &= \underline{64 \text{ cm}^2} \end{aligned} \quad \left| \begin{array}{l} \text{Only shaded} \\ \text{part (4 triangles)} \end{array} \right.$$

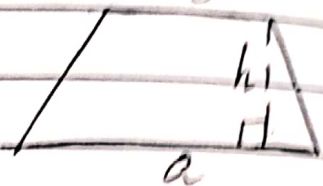
$$\begin{aligned} c) \text{ Area of triangle} &= \frac{1}{2}bh & b=30\text{cm} \\ & & h=\frac{20}{2}=10\text{cm} \\ &= \frac{1}{2} \times 30 \times 10 \\ &= 150 \text{ cm}^2 \end{aligned}$$

$$\text{Area of the shape} = 2 \times 150 \\ = \underline{\underline{300 \text{ cm}^2}}$$

Solve b and d.

$$\text{Area of a parallelogram} = bh.$$

$$\text{Area of trapezium} = \frac{1}{2} (a+b)h$$



Ex: 27.2.

$$2. \quad A = \frac{1}{2} (a+b)h$$

$$a = 13 \text{ cm}, \quad b = 8 \text{ cm}, \quad h = 8 \text{ cm}$$

$$A = \frac{1}{2} (13+8) \times 8$$

$$= \underline{\underline{84 \text{ cm}^2}}$$

$$3. \quad \text{Area of the shape} = \text{Area of rectangle} + \text{Area of trapezium}$$

$$= lb + \frac{1}{2} (a+b)h$$

$$= 11 \times 5.5 + \frac{1}{2} (11+7.2) \times 6.4$$

$$= \underline{\underline{118.74 \text{ cm}^2}}$$

Date : ___/___/___

4. Area of the shape = Area of parallelogram +
Area of triangle

$$= bh + \frac{1}{2}bh$$

$$= 15 \times 7 + \frac{1}{2} \times 15 \times 7$$

$$= \underline{\underline{157.5 \text{ cm}^2}}$$