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Tuesday

SURFACE AREA AND VOLUME

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Cube:



$$\text{Volume of cube} = a^3$$

$$\text{TSA of cube} = 6a^2$$

$$\text{LSA of cube} = 4a^2$$

Cuboid:

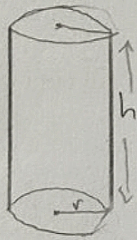


$$\text{Volume of cuboid} = l \times b \times h$$

$$\text{TSA of cuboid} = 2(lb + bh + hl)$$

$$\text{LSA of cuboid} = 2h(l + b)$$

Cylinder:

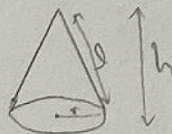


$$\text{Volume of cylinder} = \pi r^2 h$$

$$\text{TSA of cylinder} = 2\pi r(h + r)$$

$$\text{CSA of cylinder} = 2\pi rh$$

Cone:

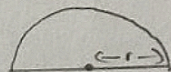


$$\text{Volume of cone} = \frac{1}{3} \pi r^2 h$$

$$\text{TSA of cone} = \pi r(l + r)$$

$$\text{CSA of cone} = \pi rl$$

Hemisphere:

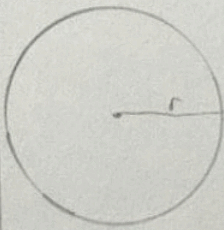


$$\text{Volume of hemisphere} = \frac{2}{3} \pi r^3$$

$$\text{TSA of hemisphere} = 3\pi r^2$$

$$\text{CSA of hemisphere} = 2\pi r^2$$

sphere:



$$\text{Volume of sphere} = \frac{4}{3}\pi r^3$$

$$\text{Surface area of sphere} = 4\pi r^2$$