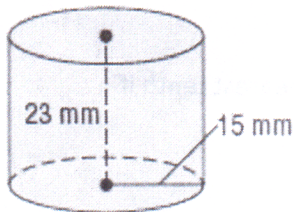


8. Fill in the following chart.

Scale Factor	3:6	2:7	6:5	4:5
Ratio of Perimeters	3:6	2:7	6:5	4:5
Ratio of Areas	9:36	4:49	36:25	16:25
Ratio of Volumes	27:216	8:343	216:125	64:125

9. Find the lateral area, surface area, and volume of the cylinder. Round to the nearest tenth if necessary.



$$h = 23$$

$$r = 15$$

$$B = \pi(15)^2 = 706.9$$

$$L = 2\pi rh$$

$$= 2\pi(15)(23)$$

$$L = 2167.7$$

$$S = 2\pi rh + 2\pi r^2$$

$$= 2\pi(15)(23) + 2\pi(15)^2$$

$$= 2167.7 + 1413.7$$

$$= 3581.4$$

$$L = \underline{2167.7 \text{ mm}^2}$$

$$S = \underline{3581.4 \text{ mm}^2}$$

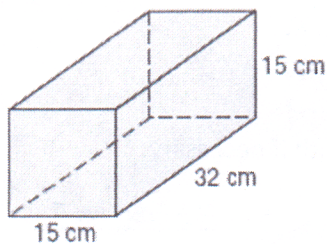
$$V = \underline{16,257.7 \text{ mm}^3}$$

$$V = \pi r^2 h$$

$$= \pi(15)^2(23)$$

$$= 16,257.7$$

10. Find the lateral area, surface area, and volume of the rectangular prism. Round to the nearest tenth if necessary.



$$P = 4(15) = 60$$

$$B = 15^2 = 225$$

$$h = 32$$

$$L = Ph$$

$$= 60(32)$$

$$L = 1920$$

$$S = Ph + 2B$$

$$= 1920 + 2(225)$$

$$= 1920 + 450$$

$$S = 2370$$

$$L = \underline{1920 \text{ cm}^2}$$

$$S = \underline{2370 \text{ cm}^2}$$

$$V = \underline{7200 \text{ cm}^3}$$

$$V = Bh$$

$$= 225(32)$$

$$V = 7200$$