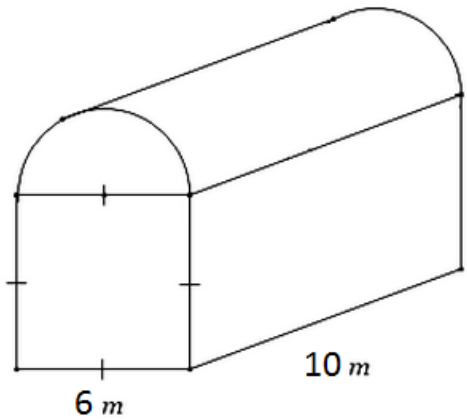


Find the surface area. Box



$$A_{\text{end}} = bh \times 2$$

$$= (6)(6) \times 2$$

$$= 72 \text{ m}^2$$

$$A_{\text{sides (+bottom)}} = bh \times 3$$

$$= (10)(6) \times 3$$

$$= 180 \text{ m}^2$$

$$252 \text{ m}^2$$

$$A_{\text{top}} = (2\pi r^2 + 2\pi rh) \div 2$$

$$= (2\pi(3)^2 + 2\pi(3)(10)) \div 2$$

$$= (18\pi + 60\pi) \div 2$$

$$= 39\pi$$

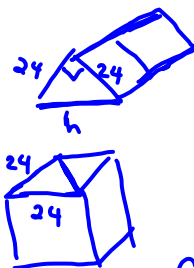
$$A_{\text{total}} = 39\pi + 252$$

$$= 374.5 \text{ m}^2$$

Problems with the homework?

Page 42 11 (no bottom) & 13

13. a) $A = 24 \times 24 \times 6$
 $= 3456 \text{ cm}^2$



$$A_{\text{triangles}} = \frac{bh}{2} \times 2$$

$$= \frac{(24)(24)}{2} \times 2$$

$$= 576 \text{ cm}^2$$

$$A_{\text{sides}} = bh \times 4$$

$$= (24)(24) \times 4$$

$$= 2304 \text{ cm}^2$$

$$c^2 = a^2 + b^2$$

$$h^2 = 24^2 + 24^2$$

$$= 576 + 576$$

$$= 1152$$

$$h = \sqrt{1152}$$

$$= 33.9 \text{ cm}$$

$$A_{\text{bottom}} = bh \times 2$$

$$= (33.9)(24) \times 2$$

$$= 1627.2 \text{ cm}^2$$

$$A_{\text{total}} = 576 + 2304 + 1627.2$$

$$= 4507.2 \text{ cm}^2$$

11. Box

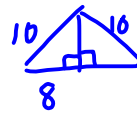
$$A_{\text{front/back}} = (12 \times 16) \times 2 \\ = 384 \text{ cm}^2$$

$$A_{\text{sides}} = bh \times 2 \\ = (15 \times 12) \times 2 \\ = 360 \text{ cm}^2$$

$$A_{\text{perch}} = 2\pi r^2 + 2\pi rh \\ = 2\pi(0.5)^2 + 2\pi(0.5)(7) \\ = 0.5\pi + 7\pi \\ = 7.5\pi$$

$$\text{overlap} = \pi r^2 \times 2 \\ = \pi(0.5)^2 \times 2 \\ = 0.5\pi \text{ cm}^2$$

$$A_{\text{roof}} = bh \times 2 \\ = (15 \times 10) \times 2 \\ = 300 \text{ cm}^2$$



$$a^2 = c^2 - b^2 \\ h^2 = 10^2 - 8^2 \\ = 100 - 64 \\ = 36$$

$$h = \sqrt{36} \\ = 6 \text{ cm}$$

$$A_{\text{hole}} = \pi r^2 \\ = \pi(1.5)^2 \\ = 2.25\pi \text{ cm}^2$$

$$A_{\text{fr:angle}} = \frac{bh}{2} \times 2 \\ = \frac{(16)(6)}{2} \times 2 \\ = 96 \text{ cm}^2$$

$$A_{\text{total}} = 384 + 360 + 300 + 96 + 7.5\pi - 2.25\pi - 0.5\pi \\ = 1140 + 4.75\pi \\ = 1154.9 \text{ cm}^2$$

CONCEPT REINFORCEMENT:

MMS9

PAGE 40: #3, 4 and 5

PAGE 41: #6 (count bottom), 8 (no bottom but have to paint overhang) and 9 (no bottoms)

PAGE 42: #10, 11 (no bottom) and 13

PAGE 43: #14 (no bottom) and 15 (the cylinder is solid, not hollow)

Homework: Page 43 14 & 15

TEST PREPARATION:

MMS9

- PAGE 12:** #14
- PAGE 18:** #4 and 5
- PAGE 21:** #9
- PAGE 31:** #10
- PAGE 40:** #3a
- PAGE 45:** #3, 4, 5 and 6
- PAGE 46:** #15 and 16

PREPARATION FOR UNIT 1 TEST

MMS9

- PAGE 44:** Read
- PAGE 45:** #4, 5, 6, and 8
- PAGE 46:** #11, 12, 13, 14, 15, and 16
- PAGE 47:** #17 and #19
- PAGE 48:** #1 to #6