

Name: _____ Teacher: _____

Date: _____

Key

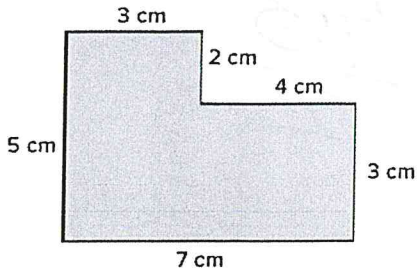
Mr. Coy

Unit 7 Study Guide

Lessons M3 #1-13

Work every problem to the best of your ability. Show all work. Circle your answers.

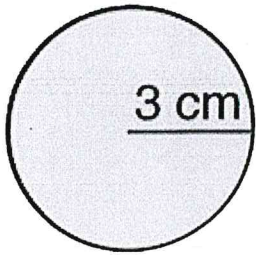
___ 1. Find the Perimeter.



$$5 + 3 + 2 + 4 + 3 + 7 =$$

- A) 14 cm B) 34 cm C) 64 cm D) 24 cm

___ 2. Find the Circumference of the circle.

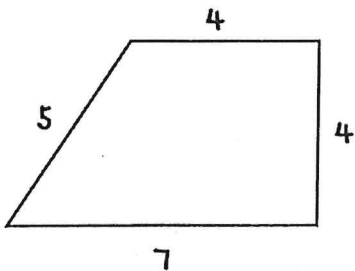


$$C = 2\pi r$$

$$2\pi(3)$$

- A) 18.8 cm B) 31.4 cm C) 125.6 cm D) 62.8 cm

___ 3. Find the Area of the figure.



$$A = \frac{b_1 + b_2}{2} \cdot h$$

$$A = \frac{4 + 7}{2} \cdot 4$$

- A) 73 ft² B) 22 ft² C) 35 ft² D) 70 ft²

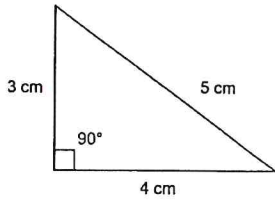
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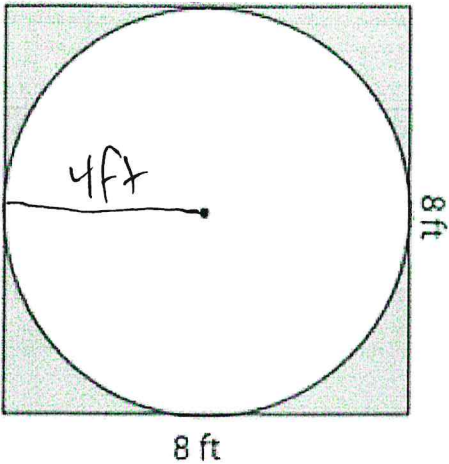
4. Find the area of the space figure.



$$A = \frac{b \cdot h}{2} \Rightarrow \frac{4 \cdot 3}{2}$$

- A) 13 ft² B) 22 ft² C) 20 ft² D) 6 ft²

5. Find the area of the circle.



$$A = \pi r^2$$
$$A = \pi (4^2)$$

- A) 43.5 ft² B) 50.2 ft² C) 58.1 ft² D) 61.7 ft²

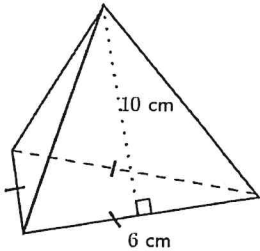
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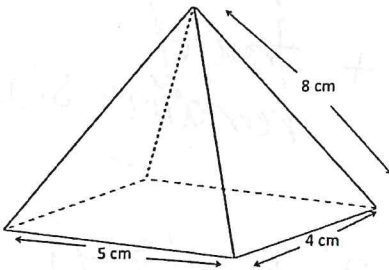
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6. Name the space figure.



- A) Triangular Prism (B) Triangular Pyramid C) Square Pyramid D) Square Prism

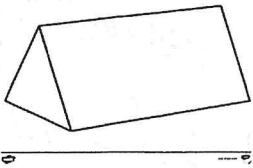
7. Name the space figure.



Spelling incorrect (sp?)

- A) Triangular Prism B) Retangular Pyramid (C) Rectangular Pyramid D) Square Prism

8. Name the space figure.



- (A) Triangular Prism B) Triangular Pyramid C) Square Pyramid D) Square Prism

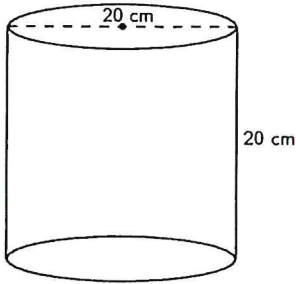
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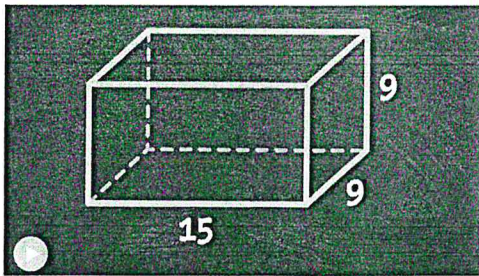
Lessons M3 #1-13

9. Name the space figure.



- A) Cone (B) Cylinder (C) Circular Prism D) Sphere

10. Find the Surface Area of the figure. (in centimeters)



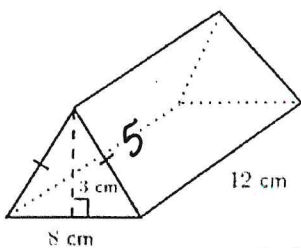
SA = 702 cm²

$$SA = 2B + \text{Area of remaining sides}$$

$$SA = 2(15 \cdot 9) + 2(9 \cdot 9) + 2(15 \cdot 9)$$

$$270 + 162 + 270$$

11. Find the Surface Area of the figure. (in centimeters)



SA = 240 cm²

(5 sides total)

$$SA = 2B + \text{Area of remaining sides}$$

$$SA = 2\left(\frac{8 \cdot 3}{2}\right) + 2(5 \cdot 12) + 1(8 \cdot 12)$$
$$= 24 + 120 + 96$$

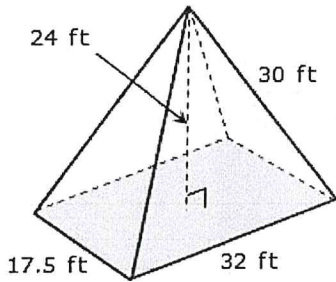
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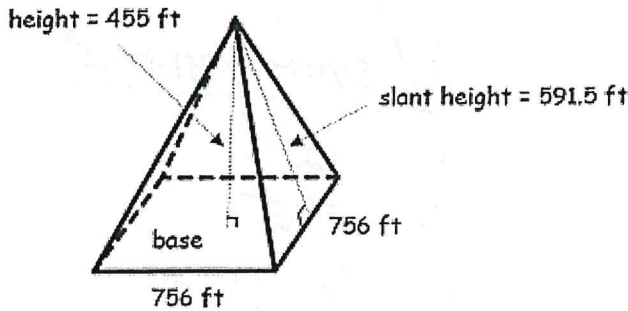
12. Find the Surface Area of the figure. (in centimeters)



SA = 2045 ft²

$$SA = \frac{p \cdot l}{2} + B$$
$$\frac{(32+17.5) \cdot 30}{2} + 17.5(32)$$
$$1485 + 560$$
$$=$$

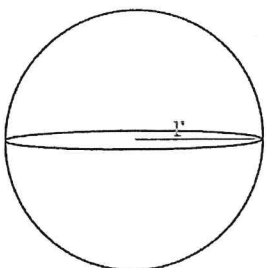
13. Find the Volume of the figure. (in centimeters)



v = 86,682,960 ft³

$$V = \frac{B \cdot h}{3}$$
$$V = \frac{(756 \cdot 756) \cdot 455}{3}$$

14. Find the Volume of the figure. (r = 4 centimeters)



v = 267.95 cm³

$$V = \frac{4\pi r^3}{3}$$
$$V = \frac{4\pi (4^3)}{3}$$

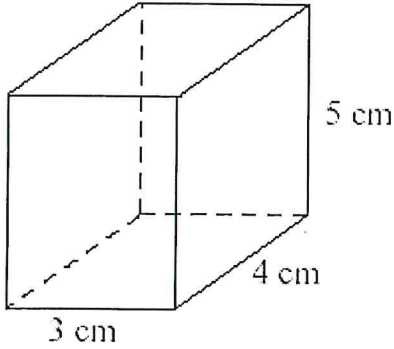
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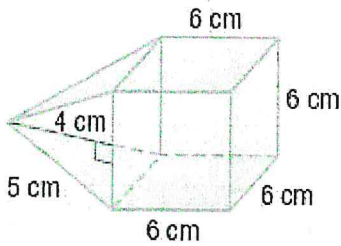
15. Find the Volume of the figure. (in centimeter)



$$V = B \cdot h$$
$$V = (3 \cdot 4) \cdot 5$$

v = 60 cm³

16. Find the Volume of the figure. (in centimeter)



V_{cube}

$$V = B \cdot h$$
$$V = (6 \cdot 6) \cdot 6$$
$$= 216 \text{ cm}^3$$

V_{square pyramid}

$$V = \frac{B \cdot h}{3}$$
$$V = \frac{(6 \cdot 6) \cdot 4}{3}$$

$$V = 48 \text{ cm}^3$$

v = 264 cm³

$$216 + 48 = \underline{264}$$

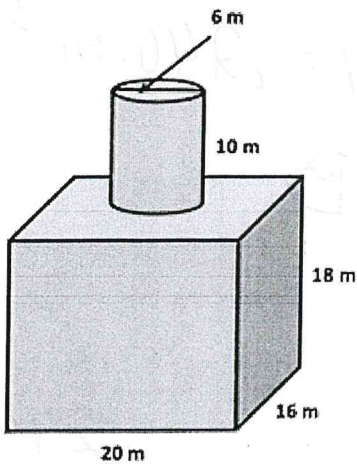
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17. Find the Volume of the figure. (in centimeter)



Rectangular
 $V = \text{prism}$

$$V = B \cdot h$$

$$V = (20 \cdot 16) \cdot 18$$

$$V = 5760$$

$V = \text{cylinder}$

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

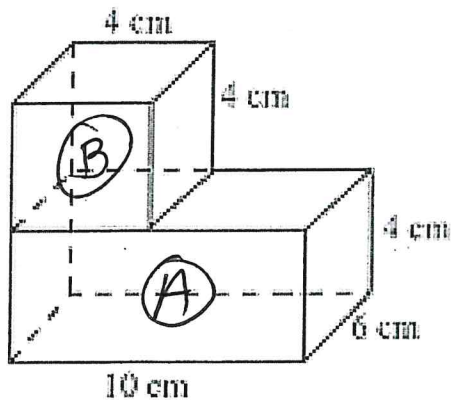
$$V = \pi (3^2) 10$$

$$V = 282.6$$

$$v = \boxed{6042.6 \text{ m}^3}$$

$$5760 + 282.6 =$$

18. Find Surface Area and Volume of the shape (in centimeters)



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SA = A

Surface Area Work

$$SA = 2B + \text{Area Remaining sides}$$

$$= 2(10 \cdot 4) + 2(6 \cdot 4) +$$

$$+ 1(6 \cdot 6) \leftarrow \text{cut off SA}$$

$$+ 1(10 \cdot 6) \leftarrow \text{bottom}$$

$$= 80 + 48 + 36 + 60 = 224$$

SA B

$$SA = 2(4 \cdot 4) + 2(6 \cdot 4) +$$

$$+ 1(4 \cdot 6) \leftarrow \text{other side not visible}$$

$$= 32 + 48 + 24 = 104$$

224 + 104

SA = 328 cm²

V = Block A

Volume Work

$$V = B \cdot h$$

$$V = (10 \cdot 6) \cdot 4 = 240 \text{ cm}^3$$

V = Block B

V = B · h

V = (4 · 4) · 4

V = 64 cm³

$$\begin{array}{r} 240 \\ + 64 \\ \hline 304 \end{array}$$

v = 304 cm³