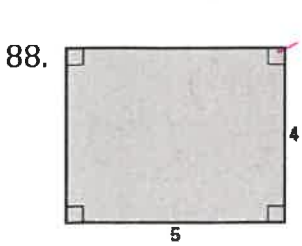
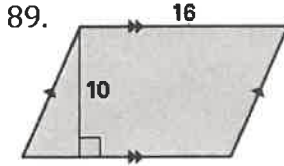


CHAPTER 11 REVIEW

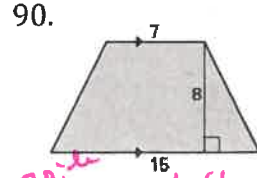
Find the area of the figure. Round decimal answer to the nearest tenth, if necessary.



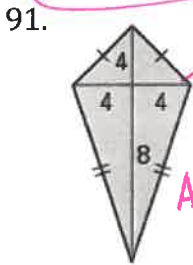
rectangle
 $A = l \cdot w$
 $= 5(4)$
 $A = 20 \text{ u}^2$



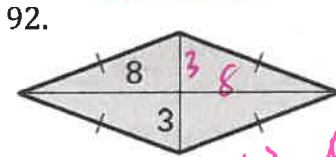
parallelogram
 $A = b \cdot h$
 $= 10(16)$
 $A = 160 \text{ u}^2$



trapezoid
 $A = \frac{1}{2}(b_1 + b_2)h$
 $= \frac{1}{2}(7 + 15)(8)$
 $= \frac{1}{2}(22)(8)$
 $A = 88 \text{ u}^2$

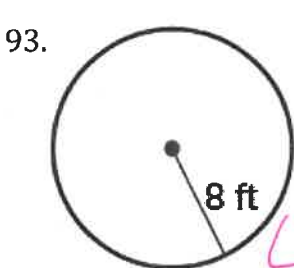


kite
 $A = \frac{1}{2}d_1d_2$
 $= \frac{1}{2}(8)(12)$
 $A = 48 \text{ u}^2$



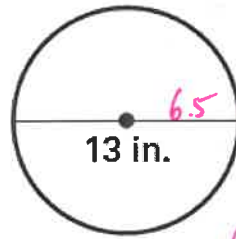
rhombus
 $A = \frac{1}{2}d_1d_2$
 $= \frac{1}{2}(6)(16)$
 $A = 48 \text{ u}^2$

Find the area and circumference of the circle.



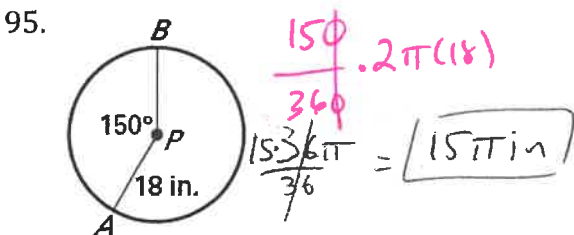
$A = \pi \cdot 8^2$
 $= 64\pi \text{ ft}^2$
 $C = 2\pi \cdot 8$
 $C = 16\pi \text{ ft}$

$A = \pi r^2$ $C = 2\pi r$

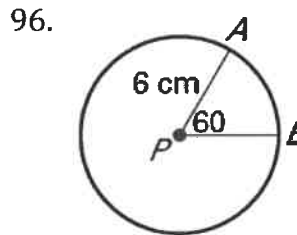


$A = \pi(6.5)^2$
 $A = 42.25\pi \text{ in}^2$
 $C = 2\pi(6.5)$
 $C = 13\pi \text{ in}$

Find the length of \widehat{AB} ?

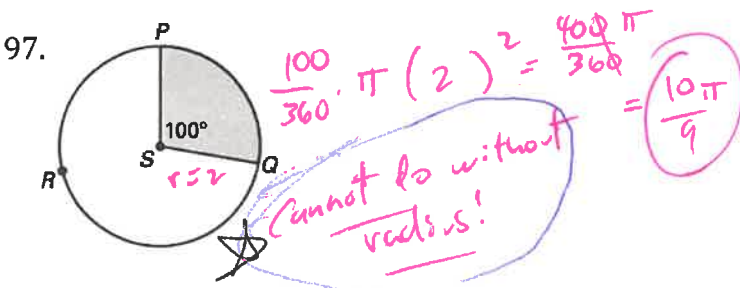


$\frac{150}{360} \cdot 2\pi(18)$
 $\frac{1536\pi}{36} = 15\pi \text{ in}$

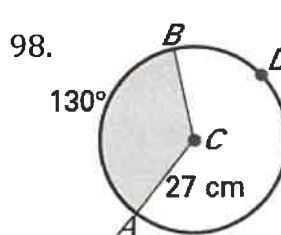


$\frac{60}{360} \cdot 2\pi(6)$
 $\frac{1}{6} \cdot 12\pi$
 $2\pi \text{ cm}$

Find the area of the sector.



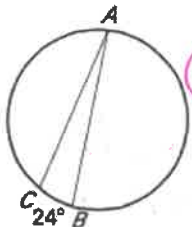
$\frac{100}{360} \cdot \pi(2)^2 = \frac{400\pi}{360}$
 $= \frac{10\pi}{9}$
Cannot do without radius!

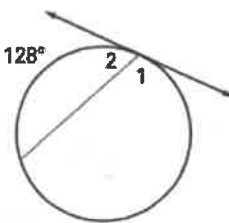


$\frac{130}{360} \cdot \pi(27)^2$
 $\frac{13}{36} \cdot 729\pi$
 $= 263.25\pi \text{ cm}^2$

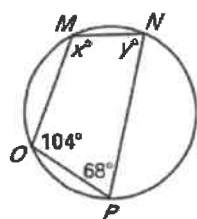
CHAPTER 10 REVIEW

Find the indicated angle measure.

76. $m\angle A$ $\frac{1}{2}(24)$

 12°

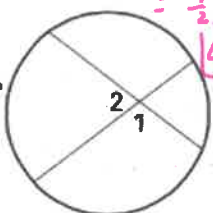
77. $m\angle 1$ and $m\angle 2$

 $\angle 2 = \frac{1}{2}(128^\circ)$
 $\angle 2 = 64^\circ$
 $\angle 1 = 180 - 64^\circ$
 $\angle 1 = 116^\circ$

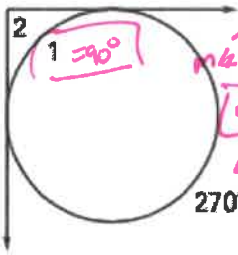
78. Find the values of the variables.

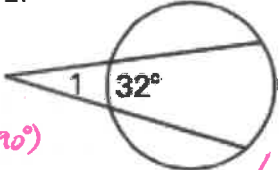


Opposite \angle 's add to 180°
 $\angle M: 180^\circ - 68^\circ$
 $\angle N: 180^\circ - 104^\circ$
 $\angle M = 112^\circ$
 $\angle N = 76^\circ$
 $x = 112^\circ$
 $y = 76^\circ$

Find the measure of each numbered angle or arc.

79. $\angle 2 = \frac{1}{2}(115 + 97)$
 $= \frac{1}{2}(212)$
 $\angle 2 = 106^\circ$

 $\angle 1 = 180 - 106^\circ$
 $\angle 1 = 74^\circ$

80. $\angle 1 = 90^\circ$

 $m\hat{A} = 270^\circ$
 $m\hat{I} = 90^\circ$
 $\angle 2 = \frac{1}{2}(270 - 90)$
 $\angle 2 = \frac{1}{2}(180)$
 $\angle 2 = 90^\circ$

81. $\angle 1 = \frac{1}{2}(80 - 32)$

 $\angle 1 = \frac{1}{2}(48^\circ)$
 $\angle 1 = 24^\circ$

Write a standard equation for a circle with the given center and radius.

82. $(-3, 0); r = 4$

$$(x + 3)^2 + y^2 = 16$$

83. $(2, -5); r = 7$

$$(x - 2)^2 + (y + 5)^2 = 49$$

Identify the center and radius of each circle with the given equation.

84. $x^2 + y^2 = 25$

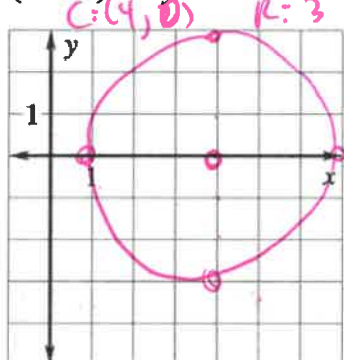
Center: $(0, 0)$ radius = 5

85. $(x - 6)^2 + (y + 1)^2 = 53.29$

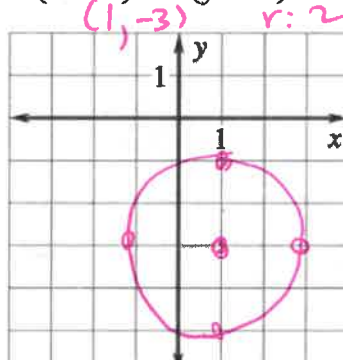
Center $(6, -1)$ radius 7.3

Graph the circle with the given equation.

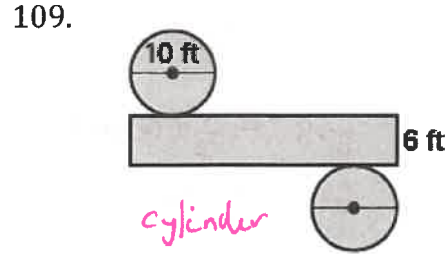
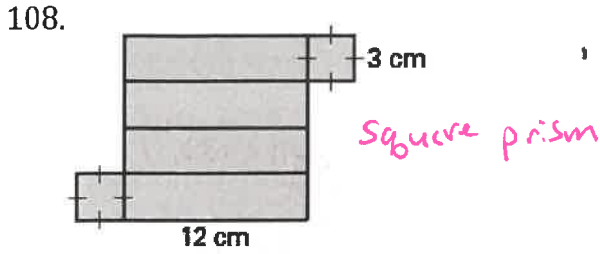
86. $(x - 4)^2 + y^2 = 9$



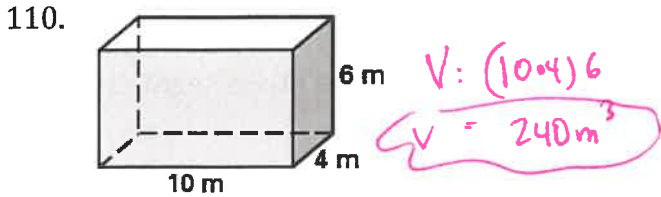
87. $(x - 1)^2 + (y + 3)^2 = 4$



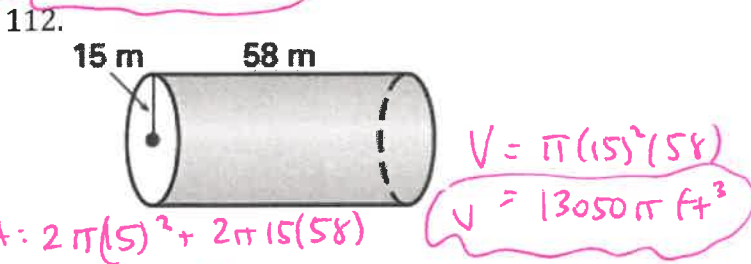
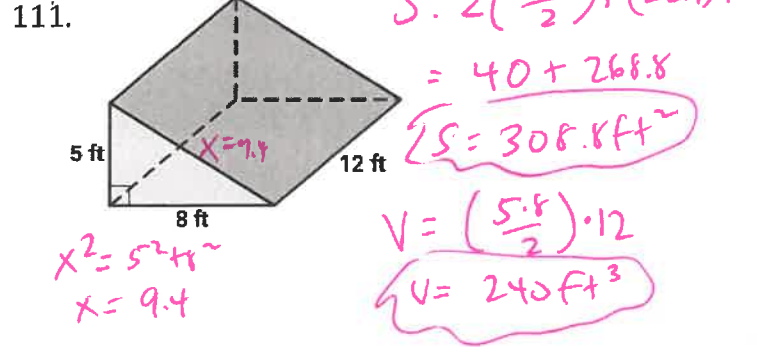
Give the most specific name for the net.



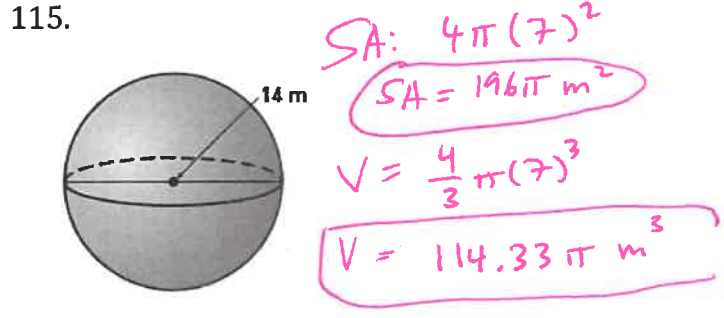
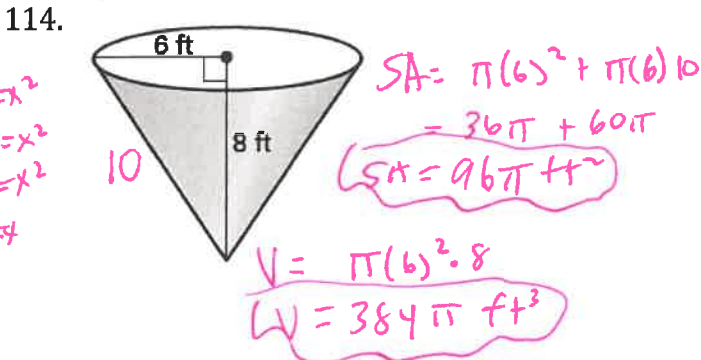
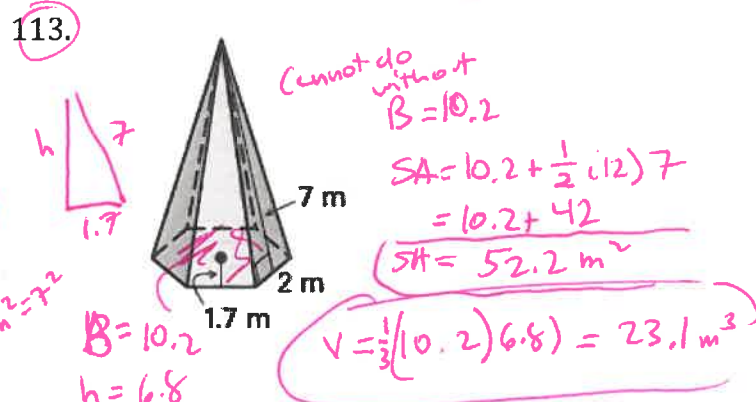
Find the surface area and volume of each solid.



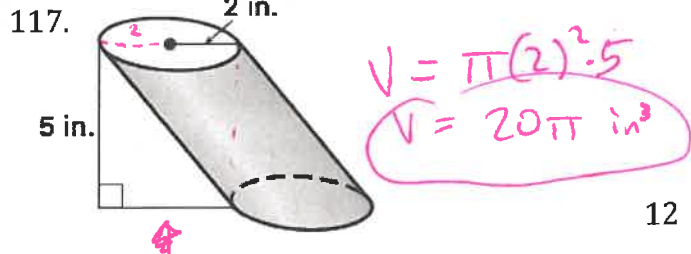
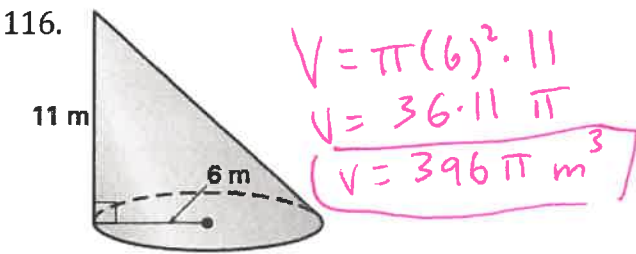
$SA: 2(10)(4) + (28)(6)$
 $= 80 + 168$
 $SA = 248 \text{ m}^2$



$SA: 2\pi(15)^2 + 2\pi(15)(58)$
 $450\pi + 1740\pi$
 $SA: 2190\pi \text{ m}^2$

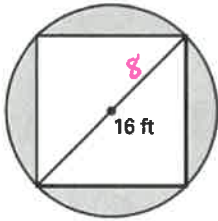


Find the volume of the solid.



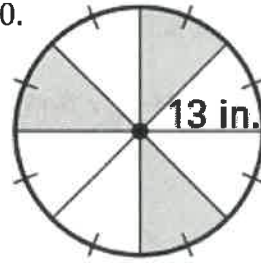
Find the area of the shaded region.

99.



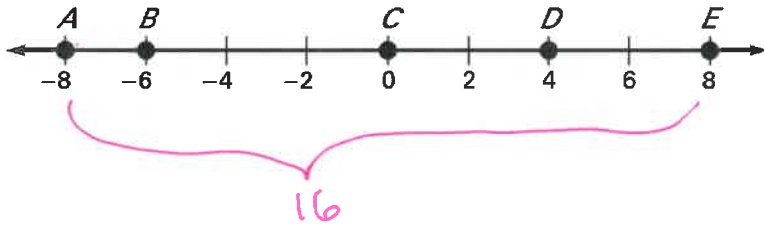
$\bigcirc - \square$
 $\pi \cdot 8^2 - \frac{1}{2}(16)(16)$
 $64\pi - 128$

100.



$\frac{3 \cdot \pi (13)^2}{8}$
 $\frac{507\pi}{8}$
 63.375π

Find the probability that a point K, selected randomly on \overline{AE} , also lies on the given segment. Express your answer as a fraction and a percent.



101. \overline{CD}

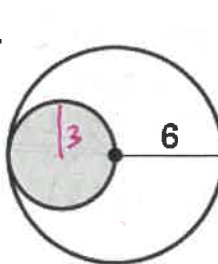
$\frac{4}{16} = 0.25$

102. \overline{CE}

$\frac{8}{16} = 0.5$

What is the probability that a point chosen at random on the figure lies in the shaded region. Express your answer as a percent.

103.



$\frac{\text{little } \bigcirc}{\text{big } \bigcirc} = \frac{\pi 3^2}{\pi 6^2} = \frac{9\pi}{36\pi} = \frac{9}{36} = \frac{1}{4} = 25\%$

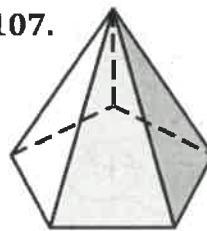
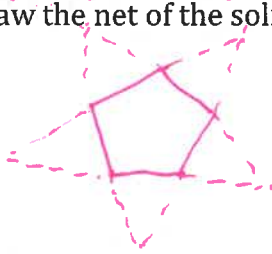
CHAPTER 12 REVIEW

Use the following diagram to answer Questions 104–107.

104. Give the most specific name for the solid.

pentagonal pyramid

105. Draw the net of the solid.



106. List the number of faces, vertices, and edges for the solid.

F: 6 V: 6 E: 10

107. Plug your answers from Question 106 into Euler's formula to verify.

$6 + 6 = 10 + 2$ ✓