

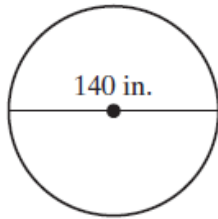
Chapter 8 Test Study Guide

Name _____

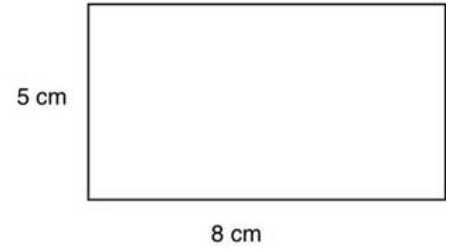
Part I: Area

Directions: Find the area

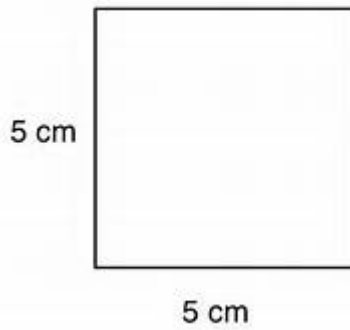
1.



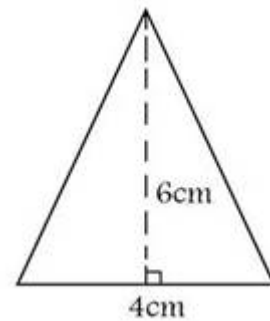
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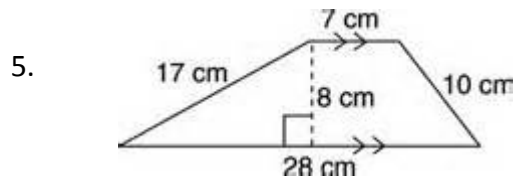


3.



4.





Part II: Square Roots and Rational and Irrational Numbers

Directions: Simplify each square root. For non-perfect squares, estimate to the nearest whole number.

6. $\sqrt{201}$

7. $\sqrt{25}$

8. $\sqrt{400}$

9. $\sqrt{196}$

10. $\sqrt{169}$

11. $\sqrt{52}$

Directions: Identify each number as rational or irrational

12. $\sqrt{81}$ _____

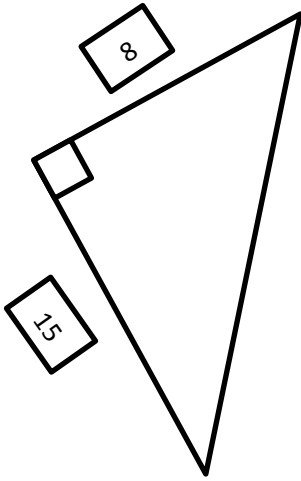
13. $7.\overline{21}$ _____

14. $-9\frac{2}{3}$ _____

15. $\sqrt{130}$ _____

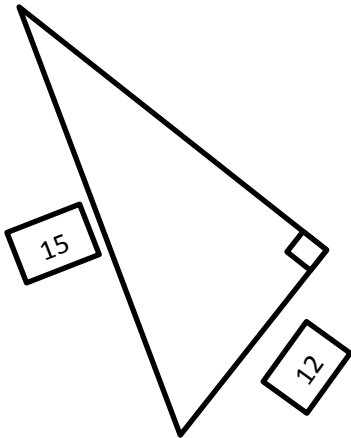
Part III: The Pythagorean Theorem

16.



Show Work!

17.



Show Work!

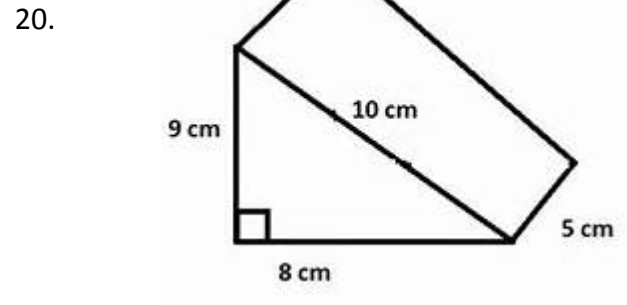
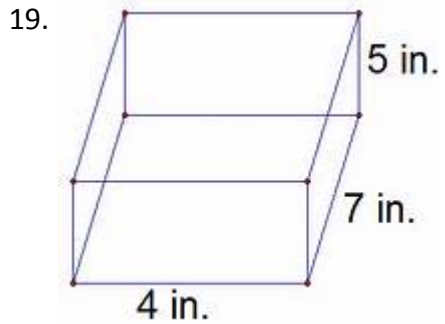
18. Stamford is 60 miles due north of the airport, and Oakdale is due east of the airport. If the distance between Stamford and Oakdale is 75 miles, how far is Oakdale from the airport?

Draw a picture:

Show work:

Part IV: Surface Area and Volume

Directions: Draw the net of each three dimensional figure and then find the surface area and volume.



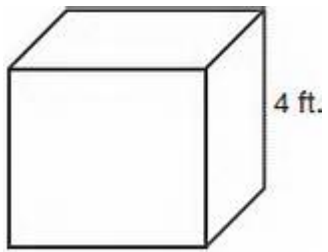
Surface Area: _____

Surface Area: _____

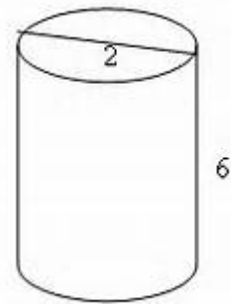
Volume: _____

Volume: _____

21.



22.



Surface Area: _____

Volume: _____

Surface Area: _____

Volume: _____

23: How much cat food would fit into a can that has a height of $14\frac{1}{4}$ cm and a diameter of 9cm? How much paper would you need to make the label?

24: Thelma and David built a recycling bin that is 6 feet wide, 12 feet long, and 14 feet high. How much trash can fit inside of the bin?