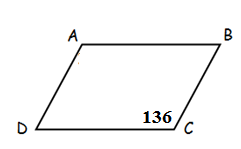
**GEOMETRY BASIC Ch 6-8, 10-12  
Semester 2 Final Exam REVIEW**

CHAPTER 6

1. Find  in parallelogram ABCD

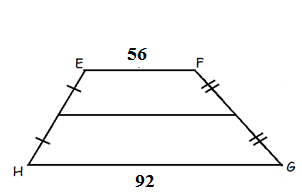
Hint: Consecutive angles are supplementary so   
 consecutive angles = 180

2. What is the sum of the measures of the interior angles of a pentagon?

Hint: Sum of the interior angles= (n-2)\*180

3. What is the measure of *each* interior angle in a regular octagon?

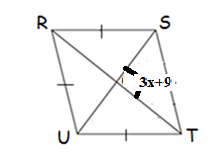
Hint: Sum of ONE interior angles=



4. What is the length of the midsegment in trapezoid EFGH?

Hint: Midsegment = top base + bottom base

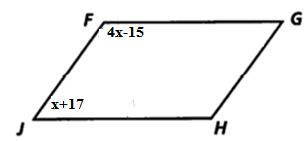
2



5. Find the value of x in the rhombus shown:

Hint: Central Angle in a rhombus = 90

6. Find the value of *x* in parallelogram *FGHJ*.

Hint: Consecutive angles are supplementary so   
 consecutive angles = 180

7. List and illustrate all the properties of a….

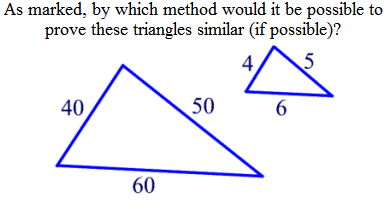
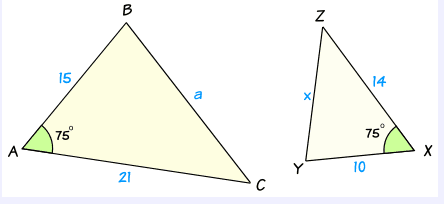
Parallelogram rhombus kite rectangle trapezoid

CHAPTER 7

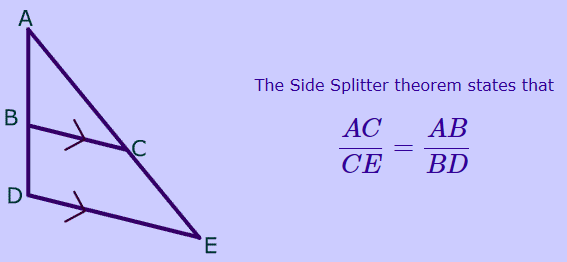
8. ∆*ABC* ~ ∆*DEF* and the similarity ratio of ∆*ABC* to ∆*DEF* is. If *AB* = 120, what is *DE*?

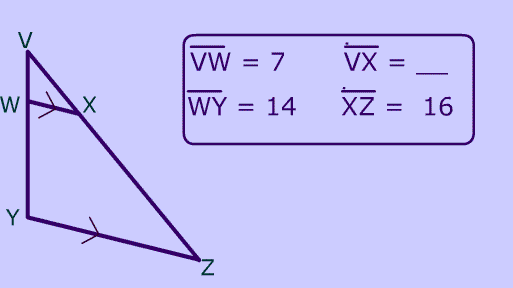
Hint: Make a proportion—cross multiply—then solve.

9. As marked, are these two triangles similar? If so how do you prove it? If not, why not?

Hint: Make sure each ratio of sides is equal.

10. Lines wx and yz are parallel. Find the value of v*x*. HINT:



11. The lengths of the sides of a triangle are in the extended ratio 2 : 7 : 12. Their perimeter is 420cm. What is the length of the longest side in centimeters?

Hint: draw a triangle and don’t forget the x’s!!

12. Explain the following postulates for proving triangles are similar: Make sure you show examples

AA~ SAS~ SSS~

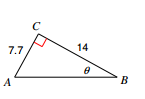
13. Solve the proportion for x:  HINT: CROSS MULTIPLY

14. To the nearest inch, a door is 72 in. tall and 28 in. wide. What is the ratio of the width to the height?

Hint: Make a proportion—cross multiply—then solve.

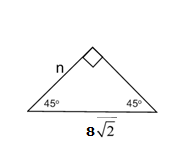
CHAPTER 8

15. What is the length of the hypotenuse of the triangle below to the nearest tenth?



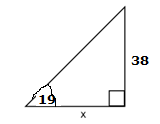
16. What is the value of n?

Hint: in a 45-45-90 triangle the side-side-hyp   
 are in a ratio of 



17. Put the radical into simplest radical form.  HINT: make a factor tree

18. What is the value of x to the nearest foot?

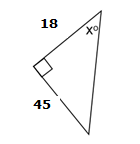


19. Classify a triangle with side lengths of 7, 10, 15.

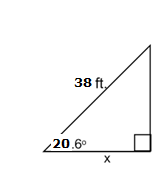
HINT: USE PYTHAGOREAN THEOREM

1. Acute
2. Right
3. Obtuse
4. Scalene
5. None

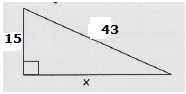
20. What is the value of x to the nearest degree?

HINT: USE SOHCAHTOA

23. A 38 ft. long ramp rises at an angle of 20.6°. How long is the base of the ramp to the nearest

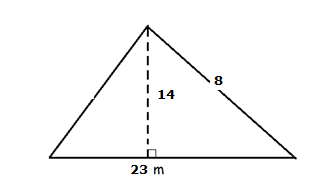
 foot? HINT: USE SOHCAHTOA

24. Find x in the simplest radical form. HINT: USE SOHCAHTOA

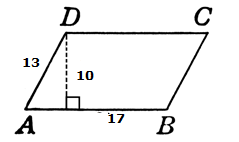


CHAPTER 10—HINT: USE THE VARIOUS AREA FORMULAS YOU’VE LEARNED!

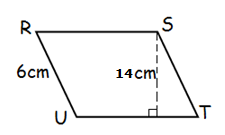
25. Find the area of the triangle shown:

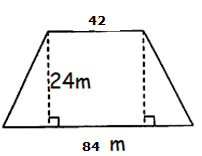


26. What is the area of parallelogram ABCD?

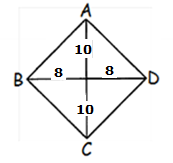


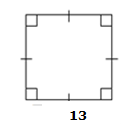
27. If the area of parallelogram RSTU is 46 cm2, what is the length of ?

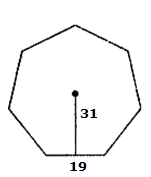




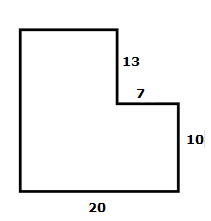
28. Find the area of the trapezoid shown.

29. Polygon ABCD is a rhombus, find its area.

30. Find the area of the polygon shown:

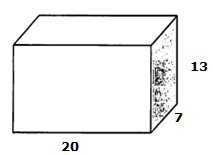


31. Find the area of the regular heptagon:

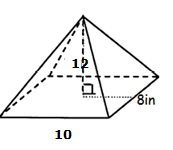


32. All the angles in the polygon shown are right angles. Find the area.

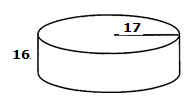
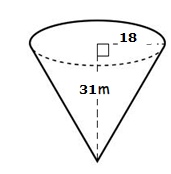
CHAPTER 11—HINT- USE THE VARIOUS VOLUME/SURACE AREA/AND LATERAL AREA FORMULAS YOU’VE LEARNED….ALSO IF NECESSARY—FIND THE BASE AREA AND BASE PERIMETER FIRST!



33. Find the volume of the rectangular prism.

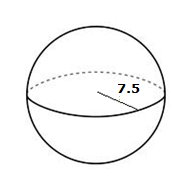
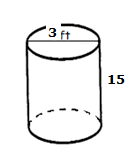
34. Find the volume of the rectangular pyramid.

35. Find the surface area of the solid.

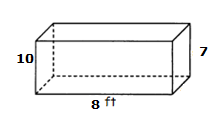


36. Find the slant height of the cone.

37. Find the lateral area of the cylinder. Round your answer to the nearest tenth.



38. Find the volume of the solid shown. Round your answer to the nearest tenth



39. Find the Surface area of the solid.

40. A polyhedron has 12 edges and 7 vertices. How many faces does it have?