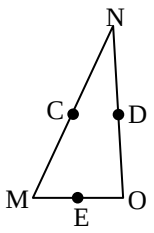
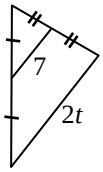
Honors Geometry Final Test Review
Extra Problems (Cumulative) Chapters 5-9

1. In ΔMNO, the points *C*, *D*, and *E* are midpoints. $CD = 4cm, CE = 8cm, and\ DE = 7cm$. (L5.1)

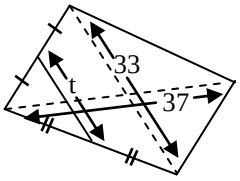


   a. Find *MO*. b. Find *NO*. c. Find *MN*.

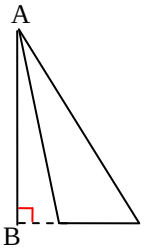
2. Find the value of *t*. (L5.1)

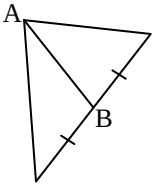


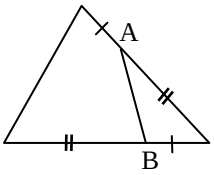
3. Find the value of *t*. (L5.1)

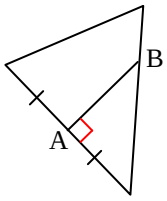


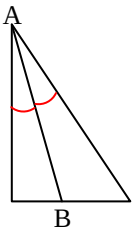
4. For each of the following, is $\overline{AB}$ a *perpendicular bisector*, an *angle bisector*, an *altitude*, a *median*, or none of these? (L5.3)

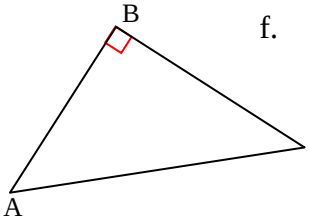
a.


b.


c.


d.


e.


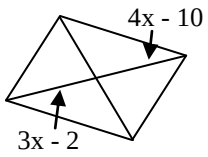
f.


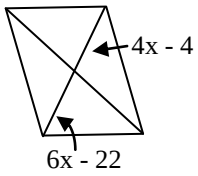
5. The lengths of two sides of a triangle are given. Describe the lengths possible for the third side. (L5.5)

   a. 4 in, 7in b. 9 cm, 17 cm c. 5 ft, 5 ft

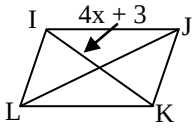
   d. 11 m, 20 m e. 6 km, 8 km f. 24 in, 37 in

Find the value of *x* for each parallelogram. (L6.2)

6. 

7. 

8. *IK* = 35



Determine whether the quadrilateral can be a parallelogram. If not, write impossible. Explain your answer. (L6.4)

9. One pair of opposite sides is parallel, and the other pair is congruent.

10. Opposite angles are congruent and supplementary, but the quadrilateral is not a rectangle.

Honors Geometry Final Test Review
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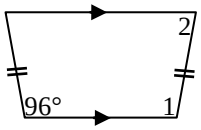
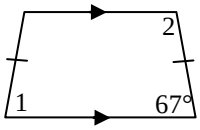
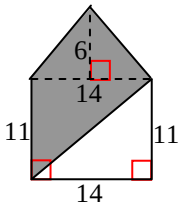
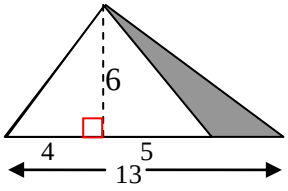
Find the measures of the numbered angles in each of the following: (L6.5)

11. 

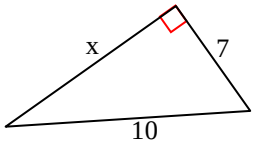
12. 

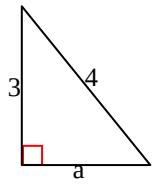
Find the area of the shaded region. (L7.1)

13. 

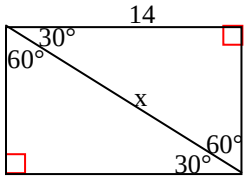
14. 

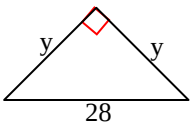
Find the value of each variable. Leave answers in simplest radical form. (L7.2)

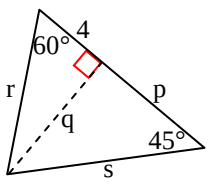
15. 

16. 

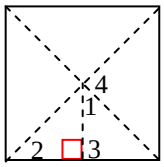
Find the value of each variable. Leave answers in simplest radical form. (L7.3)

17. 

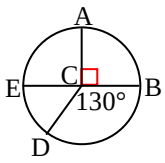
18. 

19. 

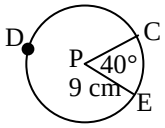
20. This regular polygon has radii and an apothem as shown. Find the measure of each numbered angle. (L7.5)



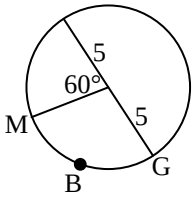
21. Find the measure of $\overset{\frown}{AED}$. (L7.6)



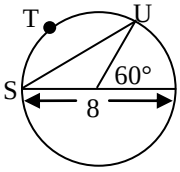
22. Find the length of $\overset{\frown}{CDE}$. (L7-6)



23. Find the area of the <u>sector</u> marked by $\overset{\frown}{GBM}$. Leave your answer in terms of π. (L7.7)



24. Find the area of the <u>segment</u> marked by $\overset{\frown}{STU}$. Round your answer to the nearest whole number. (L7.7)



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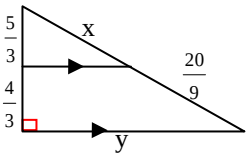
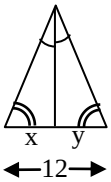
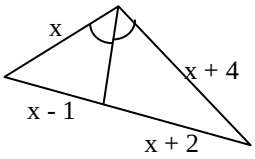
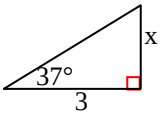
Find the values of the variables. (L8.5)

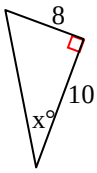
25. 

26. 

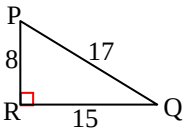
27. 

28. Find the value of *x*. Round your answer to the nearest tenth/degree. (L9.1)

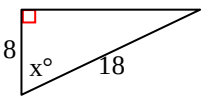
a. 

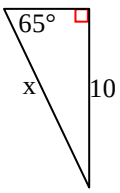
b. 

29. Write the ratios for sin *P* and cos *P*. (L9.2)

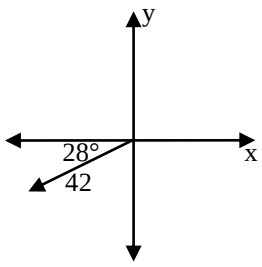


30. Find the value of *x*. Round lengths of segments to the nearest tenth and angle measures to the nearest degree. (L9.2)

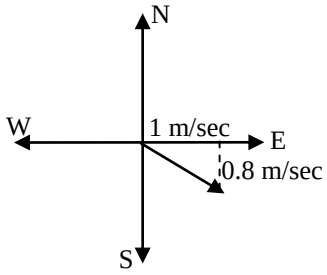
a. 

b. 

31. Describe the vector as an ordered pair. Give the coordinates to the nearest tenth. (L9.4)



32. Find the magnitude and direction of the vector. Round your answers to the nearest tenth. (L9.4)



33. Find the area of a square with radius 17ft. Round your answer to the nearest tenth. (L9.5)