

Name: \_\_\_\_\_ Period: \_\_\_\_\_

### Geometry Final Exam Practice Problems 2

1. Find the missing side length for each set of Pythagorean triples. The last number is hypotenuse.

3, a, 5

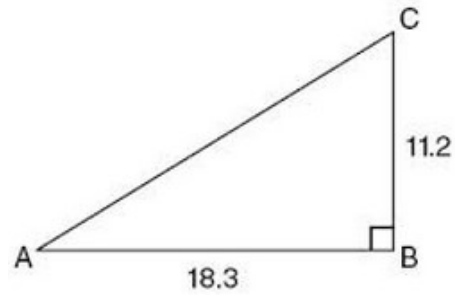
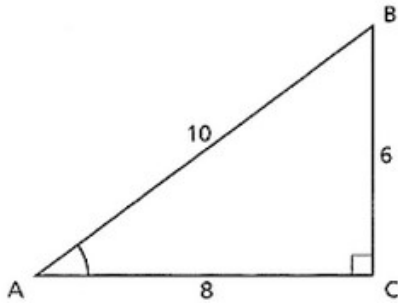
5, 12, b

c, 24, 25

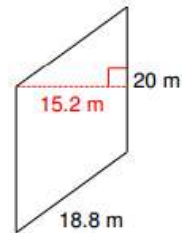
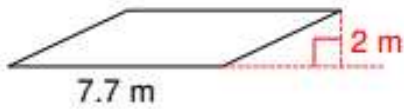
8, 15, d

e, 8, 10

2. Find the  $\sin A$ ,  $\cos A$  and  $\tan A$  for each right triangle.



3. Find the area of each parallelogram.



4. Given a midpoint and an endpoint, find the other endpoint.

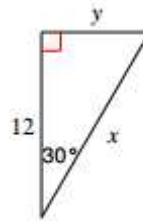
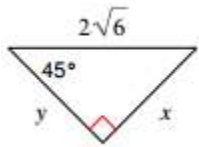
Endpoint (-4, 10)

Midpoint(4, 4)

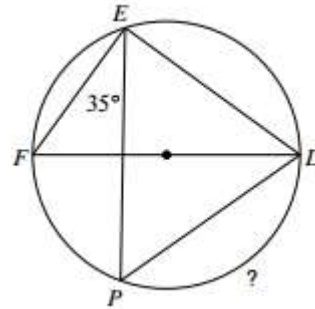
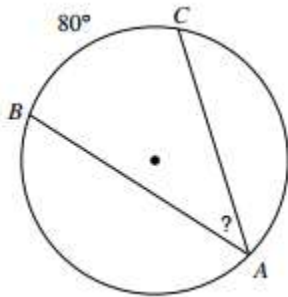
Endpoint (17, 38)

Midpoint (0, -4)

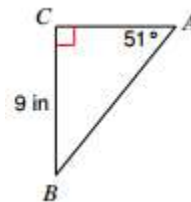
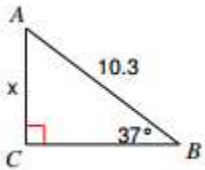
5. Find all missing sides and angles for each special right triangle.



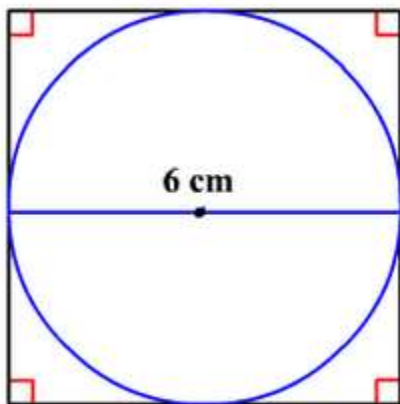
6. Find the missing angle or arc measure.



7. Find the missing side length.



8. Find the area inside the square, but outside the circle.



9. Find the area of an isosceles triangle with the given side lengths.

Legs 10, base 16

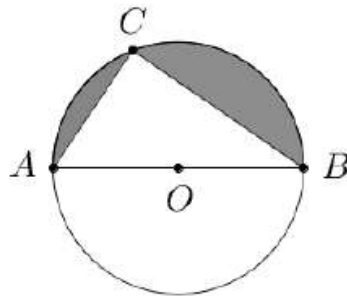
Legs 18, base 10

10. Find the area of an equilateral triangle with the given perimeter.

Perimeter 30

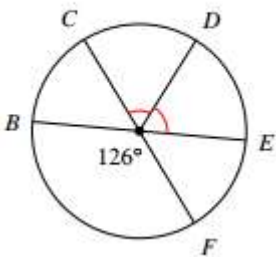
Perimeter 18

11.  $\overline{AB}$  is a diameter of circle  $O$ . Chord  $\overline{AC} = 18$  and chord  $\overline{BC} = 24$ . Find the area of the shaded region.

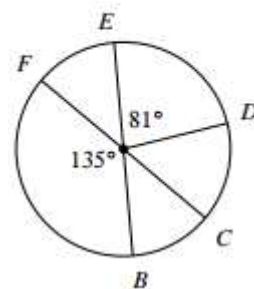


12. Find the indicated arc measure.

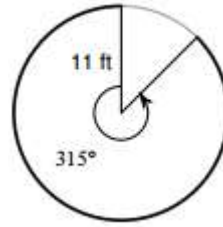
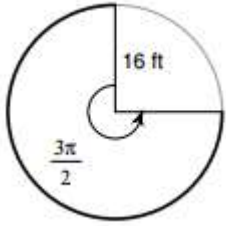
$m\widehat{EFC}$



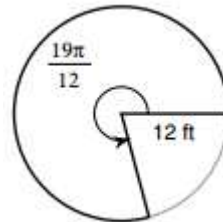
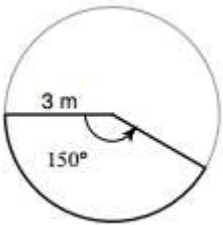
$m\widehat{CFD}$



13. Find the length of each arc in terms of pi.



14. Find the area of each sector in terms of pi.

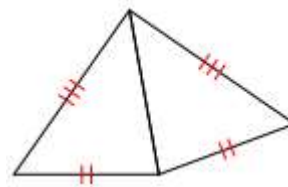
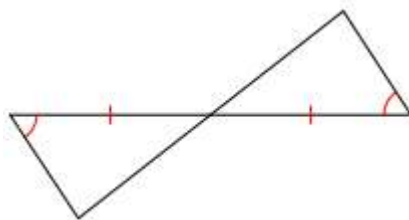
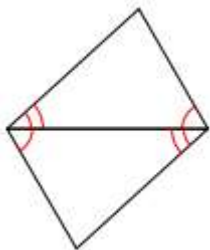


15. Find the area of the circle in terms of pi given the circumference.

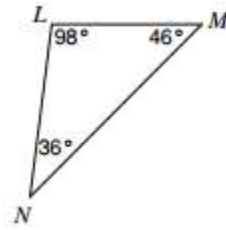
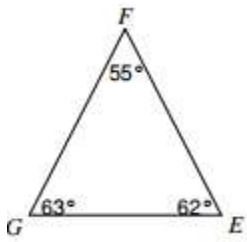
$C = 16\pi$  in

$C = 62.8$  cm

16. State which theorem proves each pair of triangles is congruent.



17. Order the sides from shortest to longest.



18. Given three side lengths of a triangle, classify the triangle by its angles.

6, 9, 13

14, 48, 50

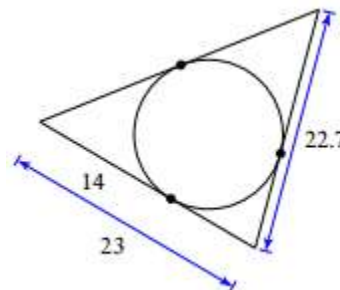
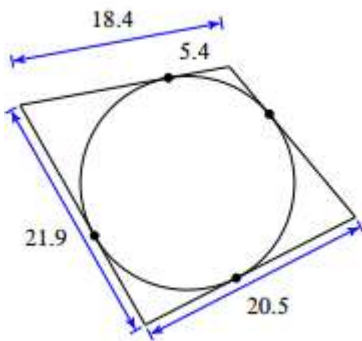
9, 10, 13

19. Find the slope, y-intercept and sketch a graph for each equation.

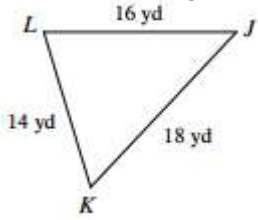
$$y = \frac{-2}{5}x + 3$$

$$6x - 2y = 8$$

20. Find the perimeter of each quadrilateral.

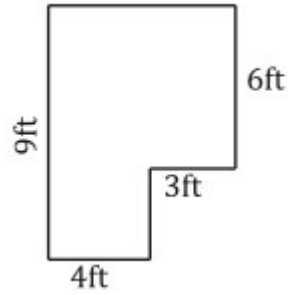
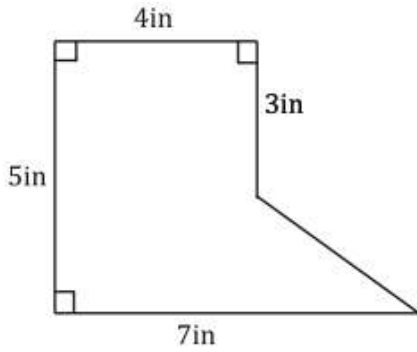


21. Order the angles from smallest to largest.



In  $\triangle TUV$   
 $UV = 17$  yd  
 $TV = 14$  yd  
 $TU = 9$  yd

22. Find the area.



23. Write the equation of the line in point-slope form given two points on the line.

$(-2, 10)$  and  $(2, 2)$

$(-10, 3)$  and  $(8, -3)$

24. Find the value of  $x$ .

