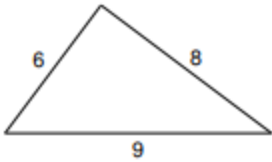
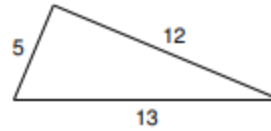


Are the triangles right triangles? SHOW WORK TO JUSTIFY YOUR ANSWER.

1.

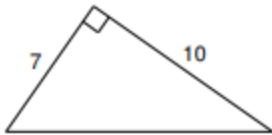


2.

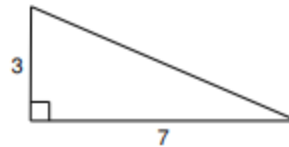


Find the missing side. SHOW ALL WORK!

3.



4.



Determine if the segment lengths form a triangle. If they do form a triangle, determine the type of triangle.

5. 18, 11, 9

6. 9, 12, 15

7. 3.1, 7.3, 10.4

8. Is a triangle with side lengths of 6, $2\sqrt{65}$, and 10 is a right triangle. SHOW WORK!!!

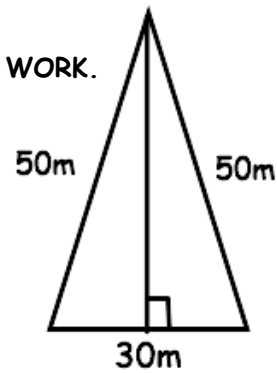
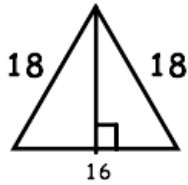
9. Convert 250 degrees to radians. 10. Convert $\frac{7\pi}{4}$ radians to degrees.

11. Complete the square

$$x^2 - 16x + 5 = 0$$

$$x^2 + 20x - 10 = 0$$

12. Find the area of the isosceles triangles shown. SHOW ALL WORK.



13. Name the ways that triangles can be proved congruent. (Hint 5 ways)

14. Name the ways that triangles can be proved similar. (Hint 3 ways)

15. Which quadrilaterals have perpendicular diagonals?

16. For a regular 32 sided figure find: SHOW WORK!

Total interior degrees

Each interior angle

Total exterior degrees

17. The angles inside a pentagon are 100, 60, 150, 75 and x . Find x . SHOW WORK!

18. Draw a circle. Label the center P . Draw chord JK . Draw diameter AJ . Draw Radius PQ

19. The equation of a line is $2x - 4y + 10 = 0$

Find the equation of a line that is parallel to the line and contains $(2, 8)$.

Find the equation of a line that is perpendicular to the line and contains $(8, -4)$.

20. For the points $A(3, -6)$ and $B(5, 8)$ find the following: SHOW ALL WORK

Slope

Midpoint

Distance