Tell whether a triangle with the given side lengths is acute, right, or obtuse. Show your work!

1) 11, 11, 15

2) 8, $8\sqrt{3}$, 16

3) 8, 14, 17

4) 0.5, 1.2, 1.3

Use the information (with the given diagram) and the Pythagorean Theorem to decide if $\triangle ABC$ is acute, right, or obtuse. Show all your work!

5) $AC = 13$, $BC = 15$, and $CD = 12$

6) $AC = 10$, $BC = 17$, and $CD = 8$

7) $AC = 13$, $BC = \sqrt{34}$, and $CD = 3$

8) $AD = 2$, $DB = 8$, and $CD = 4$
9) The sides of a triangle have lengths $x$, $x + 4$, and 20. Specify those values of $x$ for which the triangle would be acute with the longest side having the length of 20.

10) Given parallelogram RSTU, with diagonals intersecting at M. If RS = 9, ST = 20, and RM = 11. Which segment is longer, segment SM or segment RM?

11) Given parallelogram EFGH with EF = 13, EG = 24, and FH = 10. What type of parallelogram is EFGH (ex. rectangle, square, rhombus)?