PreCalculus Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Solving Right Triangles WS

Solve each of the following triangles. (That means find the measure of each missing side and angle.)

**You MUST draw a triangle for each problem and you MUST show the equation you are using to find each part.** Round your answers to the nearest hundredth unless an angle is given in DMS format; if that is the case, write your answers for the angles in DMS format.

1. Triangle ABC -- given that angle B is the right angle, side b = 5, side c = 4.

2. Triangle DEF -- given that angle F is the right angle, side d = 4.4, side f = 11

3. Triangle PQR – given that angle P = 320 , angle Q = 900 , side r = 13.93

4. Triangle DEF – given that side e = 3.2 , angle E is the right angle, angle D = 470 18’

5. Triangle CAT – given that angle A = 900 , side t = 5.82 , angle C = 50.10

6. Triangle MAT – given that side m = 8 , a = 15 , t = 17

ANSWERS:

1. Angle A = 36.870 Angle C = 53.130 side a = 3 2. Angle D = 23.580 Angle E = 66.420 side e = 10.08

3. Angle R = 580 side p = 8.70 side q = 16.43 4. Angle F = 42042’ side f = 2.17 side d = 2.35

5. Angle T = 39.90  side a = 9.07 side c = 6.96 6. Angle M = 28.070, Angle A = 61.930, Angle T = 900