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 = 32^0 , angle Q = 90^0 , side r = 13.93

4.   Triangle DEF – given that side e = 3.2 , angle E is the right angle, angle D = $47^0\ 18'$

5.   Triangle CAT – given that angle A = 90^0 , side t = 5.82 , angle C = 50.1^0

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

ANSWERS:
1. Angle A = 36.87^0 Angle C = 53.13^0 side a = 3   2. Angle D = 23.58^0 Angle E = 66.42^0 side e = 10.08
3. Angle R = 58^0 side p = 8.70 side q = 16.43   4. Angle F = $42^042'$ side f = 2.17 side d = 2.35
5. Angle T = 39.9^0 side a = 9.07 side c = 6.96   6. Angle M = 28.07^0, Angle A = 61.93^0, Angle T = 90^0