Vector Math Practice

1. What are results of the following
   1. <1,1> + <-1,0> = <0,1>
   2. <25, -5> - <10,11> = <15, -16>
   3. <3,5> \* 5 = <15,25>
   4. <8,3> + <45,3> = <53,6>
   5. <15, -16> \* 2 = <30, -32>
   6. <7, -6, 3> + <10, 21, -8> = <17, 15, -5>
   7. <8, -3, -1> - <7, 2, -3> = <15, -1, -4>
2. Find the Magnitude of the following (round to nearest tenth)
   1. <25,5> = 25.5
   2. <11,6> = 12.5
   3. <37, 17> = 40.7
   4. <-120, -30, 138> = 185.3
3. Normalize the following (round to the nearest tenth)
   1. <4,20> = <.2,.9>
   2. <6,9> = <.5,.9>
   3. <-120, -30, 138> = <-0.7, -0.2, 0.7>
4. Find the dot product of the following
   1. <4,20> Dot <6,9> = 204
   2. <11,3> Dot <6,9> = 100
5. Find the cross product for the following
   1. <10,4,10> X <3,15,8> = <-120, -50, 138>