Find the following:

1.Given points A, B, C, D, and E, how many lines can be drawn that contains two of the five points?

2.Given points A, B, C, D, E and F, how many lines can be drawn that contains two of the six points?

Given n points, the number of lines that can be drawn that contains two of the n points is given by:  
  
 n(n - 1)   
2

3.Given ten points, how many lines can be drawn that contains two of the ten points.

4.Given fifteen points, how many lines can be drawn that contains two of the fifteen points.

5.Given twenty points, how many lines can be drawn that contains two of the twenty points.

6.Given twenty five points, how many lines can be drawn that contains two of the twenty five points.

Find the following:

7.Draw a line that contains points A and B, where A and B are in plane p.

8.Draw a line that contains points X and Y, where X and Y are in plane r.

9.If points A and B are in plane p and plane r, what can you say about points A and B?

Challenge Problem:

10.Given points A, B, C, D and E, where any three of these points are non-collinear, how many planes can be drawn that contains three of the five points.

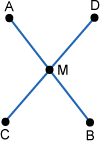
Prove the following:

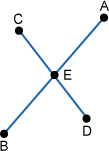
11.Theorem 1.2.1:   If two angles are vertical angles, then they are congruent.

12.Theorem 1.2.2:   If two angles are supplementary to the same angle, then they are congruent.

13.Theorem 1.2.4:   If two angles are congruent and supplementary, then each angle is a right angle.

14.Theorem 1.2.6:   An exterior angle of a triangle is equal to the sum of the two nonadjacent interior angles.

15.Given: AM    https://my.westcottcourses.com/images/common/congruence.gif  MD  
  
    M is the midpoint of   
  
Prove:  MD  https://my.westcottcourses.com/images/common/congruence.gif  MB  
  


16.Given: CE   https://my.westcottcourses.com/images/common/congruence.gif  BE  
  
    AB > CD  
  
Prove:   AE > DE  
  


17.Given:   https://my.westcottcourses.com/images/common/angleNOarc.gifb   and   https://my.westcottcourses.com/images/common/angleNOarc.gifc are complementary  
Prove:   https://my.westcottcourses.com/images/common/angleNOarc.gifa   and   https://my.westcottcourses.com/images/common/angleNOarc.gifd are complementary  
  
