

4) Using vectors, find the distance between these parallel lines:  $y = 2x - 1$   
and  $y = 2x + 6$

Notice that the point (2,3) is on the line  $y = 2x - 1$ . This means that this problem is the same as challenge problem #3. Thus the distance between these parallel lines is  $\sqrt{9.8}$

The method to solve this problem without knowing about challenge problem #3 is as follows.

step 1) pick a line and find a point on that line. you can use any point on that line.

step 2) now find the distance from that point to the other line. The process is the same process as the last problem.