Math 302 – Quiz 7 Sect 8.3 – 9.1

1. a) Graph the line $2x - y = 6$. (1 pt)
   
   $-2x + y = 6$
   
   $y = 2x - 6$
   
   $y = \frac{x}{3} + \frac{2}{3}$

   b) Draw a line that is parallel to the line above on the graph. (1 pt)

   c) Write the equation of the line you had drawn for step b. (1 pt)

   
   $y = 2x$ (This is just one of many)

   d) Write the equation a line perpendicular to the original line in part a that passes through the point $(4, 1)$. (2 pts)

   $y - 1 = -\frac{1}{2}(x - 4)$

   $y - 1 = -\frac{1}{2}x + 2$

   $y = \frac{1}{2}x + 3$

2. Draw a shape with 1 pair of perpendicular line segments below. (2 pts)
3. Name the following in as many ways as possible. (2 pts/problem)

a)

b)

4. Draw the following: (2 pts/problem)

   a) Straight angle

   b) Obtuse angle

5. How many degrees does the hour hand of a clock turn in 20 minutes? (2 pts)

\[
\frac{360^\circ}{12} = 30^\circ/\text{hr} \quad 20\text{ min} = \frac{1}{3} \text{ hr}
\]

\[
\text{So } 30^\circ - \frac{1}{3} = 10^\circ
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