

**Chapter Nine Review****Section 9.1 Some Basic Definitions**

1. points  $C$  and  $D$ , line  $CD$ , and plane  $GHI$
2.  $m(\overline{AB}) = 5$  units
3.  $\angle 1$ ,  $\angle B$ ,  $\angle ABC$ , and  $\angle CBA$
4.  $m(\angle 1) = 48^\circ$
5.  $\angle 1$  and  $\angle 2$  are acute,  
 $\angle ABD$  and  $\angle CBD$  are right angles,  
 $\angle CBE$  is obtuse,  
and  $\angle ABC$  is a straight angle.
6. obtuse angle
7. right angle
8. straight angle
9. acute angle
10.  $x = 50 - 35$   
 $x = 15$
11.  $y = 180 - 30$   
 $y = 150$
12.  $m\angle 1 = 65^\circ$   
 $m\angle 2 = (180 - 65)^\circ = 115^\circ$
13. The complement would be  
 $90 - 50 = 40^\circ$ .
14. The supplement would be  
 $180 - 140 = 40^\circ$ .
15. No. They do add to give  $180^\circ$ , but there are more than 2 angles, so they are not considered supplementary angles.

**Section 9.2 Parallel and Perpendicular Lines**

16. part a is parallel
17.  $\angle 4$  and  $\angle 6$ ,  $\angle 3$  and  $\angle 5$
18.  $\angle 4$  and  $\angle 8$ ,  $\angle 3$  and  $\angle 7$ ,  $\angle 1$  and  $\angle 5$ ,  
 $\angle 2$  and  $\angle 6$
19.  $\angle 1$  and  $\angle 3$ ,  $\angle 2$  and  $\angle 4$ ,  $\angle 5$  and  $\angle 7$ ,  
 $\angle 6$  and  $\angle 8$

