

## Lesson 5.2

### Homework Answers

Pg 251 - #1-25, 35-39 odd, 44, 46, 50-52

1) $\overline{AC}$ is the $\perp$ bisector of $\overline{BD}$	23) 10
2) 15	24) 7
3) 18	25) 14
4) 8	35) $C(3, 2); D(3, 0); AC = BC = 3,$ $AD = BD = \sqrt{13}$
5) The set of point equidistant fm $H$ & $S$ is the $\perp$ bisector of $\overline{HS}$ .	37) $C(0, 0); D(1, 1); AC = BC = 3,$ $AD = BD = \sqrt{5}$
6) $x = 12; JK = 17; JM = 17$	39) $C(\frac{5}{2}, \frac{5}{2}); D(5, 3); AC = BC = \frac{\sqrt{26}}{2},$ $AD = BD = \sqrt{13}$
7) $y = 3; ST = 15; TU = 15$	44) $x = 3$
8) $\overline{HL}$ is the $\angle$ bisector of $\angle JHG$ because a pt on $\overline{HL}$ is equidistant from $J$ & $G$ .	46) $y = -\frac{1}{2}x + 4$
9) $y = 9; m\angle FHL = 54; m\angle KHL = 54$	50) D
10) 27	51) H
11) Pt $E$ is on the bisector of $\angle KHF$	52) D
12) 5	
13) 10	
14) 10	
15) Isosceles; it has 2 $\cong$ sides.	
16) equidistant; $RT = RZ$	
17) A pt is on the $\perp$ bisector of a segment <i>iff</i> it is equidistant fm the endpts of the segment	
18) 12	
19) 4	
20) 4	
21) 16	
22) 5	