DAY 4 HOMEWORK – 1.3 BOOK WORK
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2. Which point is the vertex of $\angle BCD$? Which rays form the sides of $\angle BCD$?

L is in the interior of $\angle JKM$. Find each of the following.

7. $m\angle JKM$ if $m\angle JKL = 42°$ and $m\angle LKM = 28°$

8. $m\angle LKM$ if $m\angle JKL = 56.4°$ and $m\angle JKM = 82.5°$

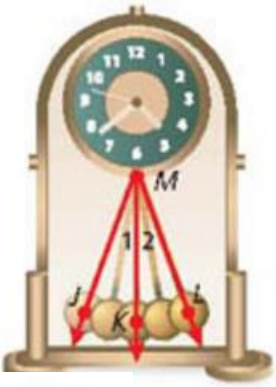
Multi-Step $\overrightarrow{BD}$ bisects $\angle ABC$. Find each of the following.

9. $m\angle ABD$ if $m\angle ABD = (6x + 4)°$ and $m\angle DBC = (8x - 4)°$

10. $m\angle ABC$ if $m\angle ABD = (5y - 3)°$ and $m\angle DBC = (3y + 15)°$

PRACTICE AND PROBLEM SOLVING

11. **Physics** Pendulum clocks have been used since 1656 to keep time. The pendulum swings back and forth once or twice per second. Name all of the angles in the diagram.

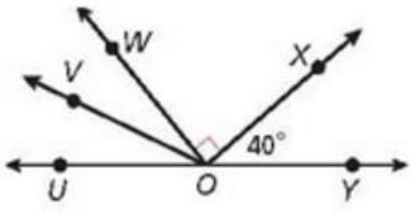


Multi-Step $\overrightarrow{SP}$ bisects $\angle RST$. Find each of the following.

17. $m\angle RST$ if $m\angle RSP = (3x - 2)°$ and $m\angle PST = (9x - 26)°$

18. $m\angle RSP$ if $m\angle RST = \frac{5}{2}y°$ and $m\angle PST = (y + 5)°$

41. $m\angle UOW = 50°$, and $\overrightarrow{OV}$ bisects $\angle UOW$. What is $m\angle VOY$?



Ⓐ 25° Ⓒ 130°
Ⓑ 65° Ⓓ 155°

42. What is $m\angle UOX$?

Ⓕ 50° Ⓖ 115° Ⓗ 140° Ⓙ 165°

43. $\overrightarrow{BD}$ bisects $\angle ABC$, $m\angle ABC = (4x + 5)°$, and $m\angle ABD = (3x - 1)°$. What is the value of x?

Ⓐ 2.2 Ⓑ 3 Ⓒ 3.5 Ⓓ 7

45. **Short Response** If an obtuse angle is bisected, are the resulting angles acute or obtuse? Explain.