HW: WEDNESDAY Jan 15

Tues Jan 14, 2014 Angle Practice Show your work in your Comp Bk.

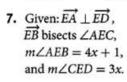
- 1. Given: Point K is between points H and J, HK = x - 5, KJ = 5x - 12 and HJ = 25. Find the value of x.
 - **a.** 7
- b. 2
- c. 6
- **2.** If *K* is the midpoint of \overline{HJ} , HK = x + 6, and HJ = 5x - 6, then $KJ = \frac{?}{}$.
 - **a.** 6
- **b.** 3
- c. 12
- d. 9

d. 9

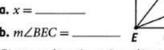
- **3.** Point D is in the interior of $\angle ABC$, $m\angle ABC = 10x - 7$, $m\angle ABD = 6x + 5$, and $m\angle DBC = 36^{\circ}$. What is $m\angle ABD$?
 - a. 3°
- b. 23°
- c. 17°
- d. 77°
- **4.** If $\angle P$ and $\angle Q$ are complementary, $m\angle P = 5x + 3$, and $m\angle Q = x + 3$, then $x = \frac{?}{}$
 - **a.** 30
- b. 29
- c. 0
- d. 14
- **5.** Ray QS bisects $\angle PQR$. If $m\angle PQS = 5x$ and $m\angle RQS = 2x + 6$, then $m\angle PQR = \frac{?}{}$.
 - a. 10°
- b. 20°
- c. 6°
- d. 2°

Use the given diagram and information to determine the missing measures.

- **6.** Given: $m \angle 1 = 4x + 30$ and $m \angle 3 = 2x + 48$
 - **a.** $x = _{--}$
 - **b.** $m \angle 3 =$
- c. $m \angle 2 =$



- $\mathbf{q}. \ x = \underline{\hspace{1cm}}$
- **b.** $m \angle BEC = _$



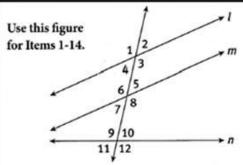
- **8.** Given: $m \angle 1 = 2x + 8$, $m \angle 2 = x + 4$, and $m \angle 3 = 3x + 18$

 - **a.** x = _____ **b.** $m \angle 4 = _$

c. Is ∠4 complementary to ∠2? Explain.



Show all work in your Comp Bk. Tue Jan 14, 2014 Angle Practice#2



- 1. List all pairs of alternate interior angles.
- 2. List all pairs of same-side interior angles.
- 3. If $I \parallel m$ and $m \angle 5 = 80^\circ$, then what is $m \angle 2$?
 - a. 100°
- c. 80°
- b. 50°
- d. Not enough information
- **4.** If $l \parallel m$ and $m \angle 6 = 110^\circ$, then what is $m \angle 3$?
 - a. 70°
- c. 80°
- b. 110°
- d. Not enough information
- 5. If $l \parallel m$, $m \angle 4 = 12x + 5$, and $m \angle 5 = 8x + 17$, then what is $m \angle 2$?
 - a. 139°

- b. 7.9° c. 3° d. 41°
- 6. If l | m, which two angles are supplementary?
 - ∠1 and ∠6
- c. ∠1 and ∠8
- b. ∠3 and ∠5
- d. ∠4 and ∠5
- 7. If $l \parallel m, m \angle 4 = 15x 7$, and $m \angle 6 = 20x + 1$ 12, then $m \angle 8 = \frac{?}{}$
 - a. 112°
- b. 5° c. 68°
 - d. 3°

Determine whether each statement is true or false. Justify your response with the appropriate postulate or theorem.

In the diagram, $l \parallel m$ and $m \nmid n$.

- **8.** $\angle 5$ is supplementary to $m\angle 3$
- 9. $m \angle 9 = m \angle 6$
- **11.** ∠4 ≅ ∠10
- 10. $\angle 3 \cong \angle 8$
- **12.** ∠4 ≅ ∠6
- 13. $m \angle 8 + m \angle 10 = 180^{\circ}$
- **14.** $\angle 4$ is supplementary to $\angle 9$.