

Unit 1.1, Sections 6-10 Test Review

Section 6:

1. What is the difference between inductive reasoning and deductive reasoning?
  
2. Determine whether the stated conclusion is valid based on the given information. If not, write invalid. Explain your reasoning.
  - a. **Given:** If the sum of the measures of two angles is 90, then the angles are complementary.  $m\angle ABC$  is 45 and  $m\angle DEF$  is 48.  
**Conclusion:**  $\angle ABC$  and  $\angle DEF$  are complementary
  
  - b. **Given:** If the sum of the measures of two angles is 180, then the angles are supplementary.  $\angle 1$  and  $\angle 2$  are a linear pair.  
**Conclusion:**  $\angle 1$  and  $\angle 2$  are supplementary.
  
3. Use the law of syllogism to draw a valid conclusion from the statements, if possible.  
*If a marine animal is a starfish, then it lives in the intertidal zone of the ocean. The intertidal zone is the least stable of the ocean zones.*
  
4. Write a conclusion based on the given statement. Is it valid by the law of detachment or the law of syllogism?
  - (1) If the measure of an angle is greater than 90, then it is obtuse.
  - (2)  $m\angle T$  is greater than 90
  - (3)

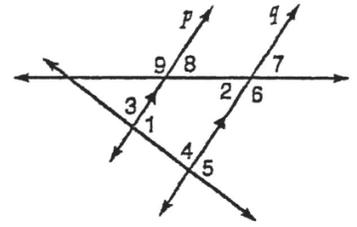






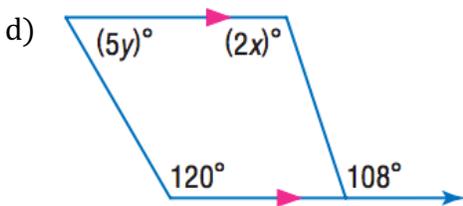
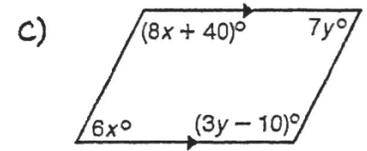
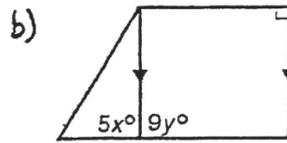
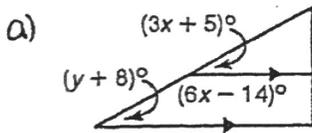
**Section 9:**

14. In the figure at the right  $p \parallel q$ ,  $m\angle 1 = 78$ , and  $m\angle 2 = 47$ . Find the measure of each angle.

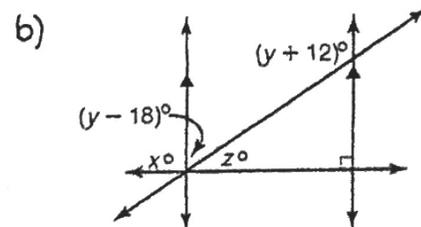
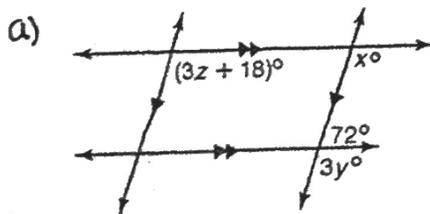


- a)  $\angle 3$       b)  $\angle 4$       c)  $\angle 5$   
 d)  $\angle 6$       e)  $\angle 7$       f)  $\angle 8$       g)  $\angle 9$

15. Find the values of  $x$  and  $y$ , in each figure.



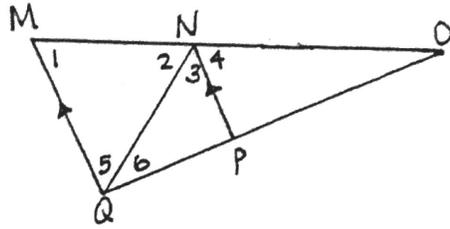
16. Find the values of  $x$ ,  $y$ , and  $z$  in each figure.



Section 10:

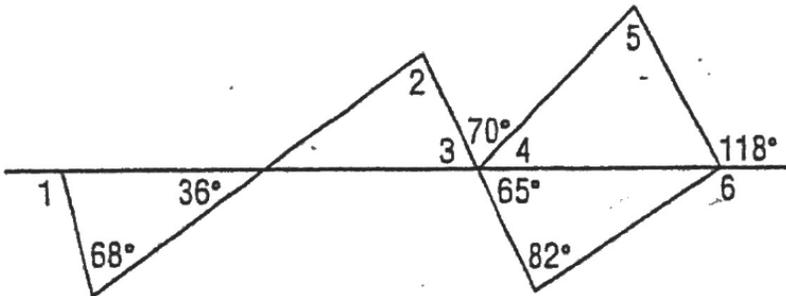
17. Given:  $\overline{MQ} \parallel \overline{NP}$   
 $\angle 4 \cong \angle 3$

Prove:  $\angle 1 \cong \angle 5$



Statements	Reasons

18. Find the measurements for all the numbered angles shown below.



19. What do the sum of the angles of any triangle add up to be?