Name: _____ Class: _____ Date: _____ ID: A

P10 - Review Package 5

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. An angle of 134° is a(n) _____ angle.

a. acute
b. right
c. reflex
d. obtuse

____ 2. Adding 90° to an acute angle will always produce a(n) _____ angle.

a. acute
b. right
c. reflex
d. obtuse

____ 3. A bearing of 49° east of north is closest to which of the following standard bearings?

a. E
b. NE
c. NNE
d. ENE

____ 4. A bearing of 34° south of east is closest to which of the following standard bearings?

a. S
b. SE
c. SSE
d. ESE

____ 5. An unknown angle is bisected. Each resulting angle measures 39°. What is the unknown angle?

a. 68°
b. 39°
c. 78°
d. 73°

____ 6. An unknown angle is bisected. Each resulting angle measures 76°. What is the unknown angle?

a. 142°
b. 147°
c. 76°
d. 152°

____ 7. Two lines are perpendicular when:

a. The angle between them is acute.
b. The angle between them is obtuse.
c. The angle between them is 45°.
d. The angle between them is 90°.

____ 8. If the complement of a 40° angle is bisected, what will each resulting angle measure?

a. 12.5°
b. 25.0°
c. 50.0°
d. 37.0°

____ 9. If the complement of an angle of 25° is bisected, what will each resulting angle measure?

a. 65.0°
b. 16.3°
c. 44.5°
d. 32.5°

____ 10. If the supplement of a 22° angle is bisected, what will each resulting angle measure?

a. 158.0°
b. 34.0°
c. 91.0°
d. 79.0°

____ 11. Which of the following statements is true?

a. If an obtuse angle is bisected, the bisecting line will be perpendicular to it.
b. If a straight angle is bisected, the bisecting line will be perpendicular to it.
c. If a reflex angle is bisected, the bisecting line will be perpendicular to it.
d. If an acute angle is bisected, the bisecting line will be perpendicular to it.

____ 12. If you bisect a reflex angle, the two resulting angles will be obtuse.

a. Always.
b. Sometimes.
c. Never. They will always be acute.
d. Never. You cannot bisect a reflex angle.

____ 13. A transversal intersects two parallel lines. If one angle is 64°, what will the corresponding angle be?

a. 68°
b. 64°
c. 116°
d. 26°

____ 14. A transversal intersects two parallel lines. If one angle is 93°, what will the corresponding angle be?

a. 93°
b. 87°
c. 86°
d. 47°

____ 15. A transversal intersects two parallel lines. If one angle is 153°, what will the alternate interior angle be?

a. 146°
b. 153°
c. 77°
d. 27°

____ 16. A transversal intersects two parallel lines. If one angle is 49°, what will the alternate interior angle be?

a. 131°
b. 49°
c. 25°
d. 42°

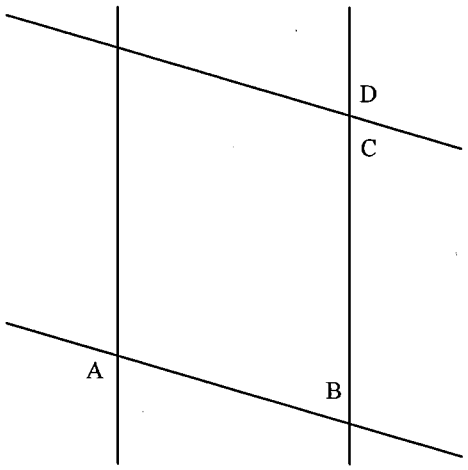
____ 17. Two interior angles lie on the same side of a transversal that intersects two parallel lines. If one angle is 60°, what will the other angle be?

a. 30°
b. 30°
c. 120°
d. 67°

____ 18. Two interior angles lie on the same side of a transversal that intersects two parallel lines. If one angle is 143°, what will the other angle be?

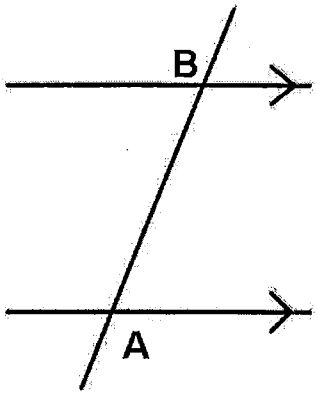
a. 150°
b. 37°
c. 72°
d. 53°

____ 19. In the diagram below, opposing lines are parallel. If ∠A is 108°, what is the measure of ∠B?



a. 108°
b. 54°
c. 18°
d. 72°

____ 20. If ∠A is 160°, what is the measure of ∠B?



a. 20°
b. 160°
c. 106°
d. 70°

Short Answer

1. The complement of an angle is 22°. What type of angle is it and what is its size?

2. The angle between two perpendicular lines is _____.

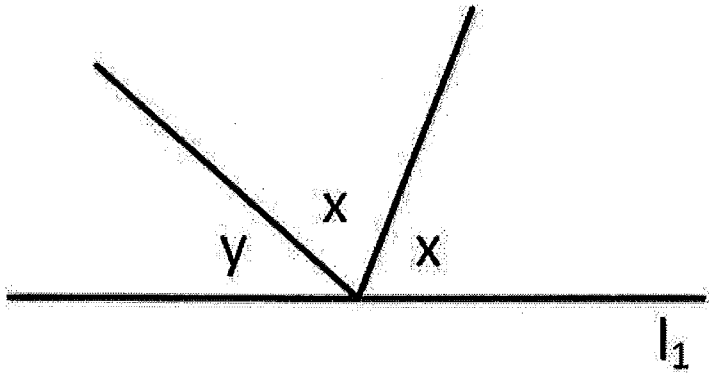
3. A transversal intersects two parallel lines. What will be the measure of an angle corresponding to an angle of 44°?

4. A transversal intersects two parallel lines. What will be the measure of an angle corresponding to an angle of 108°?

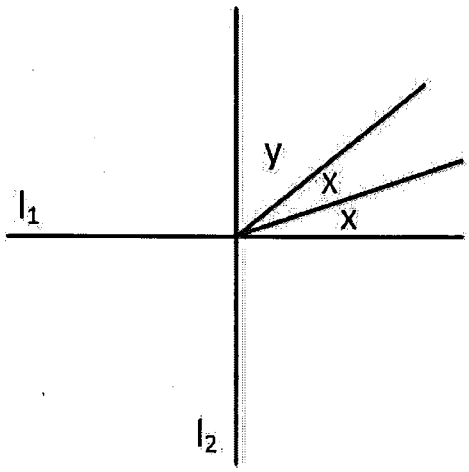
5. Two interior angles lie on the same side of a transversal that intersects two parallel lines. If one angle is 109°, what will the other angle be? Explain your reasoning.

Problem

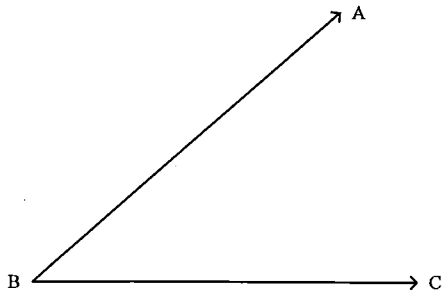
1. In the figure below, if angle y is 41°, what must the value of x be to make l_1 a straight angle?



2. In the figure below, if angle y is 53°, what must the value of x be to make l_1 and l_2 perpendicular?



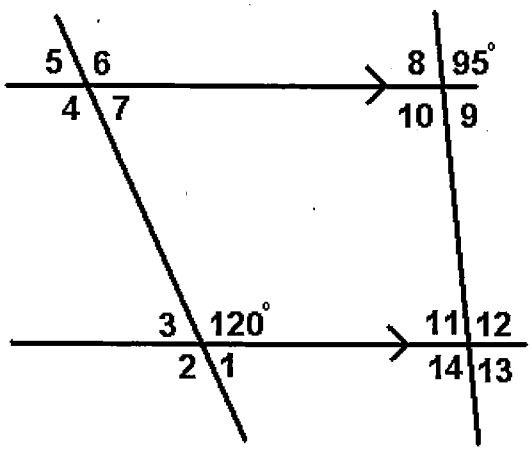
3. Bisect $\angle ABC$ using a straight edge and compass.



4. State at least one requirement for two lines intersected by a transversal to be parallel.

Name: _____ ID: A

5. Identify the measures of each of the angles indicated.



Solving Angle Measures	
Angle Measure	**Reason**
∠1 =	
∠2 =	
∠3 =	
∠4 =	
∠5 =	
∠6 =	
∠7 =	
∠8 =	
∠9 =	
∠10 =	
∠11 =	
∠12 =	
∠13 =	
∠14 =	