

# **Geometry B**

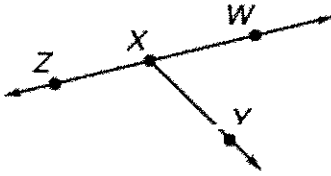
## **Semester 1**

### **Midterm Review Packet**

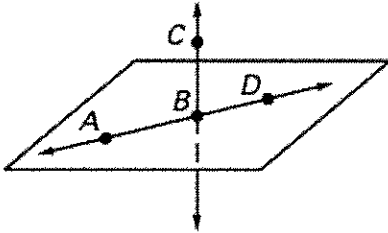
Name: \_\_\_\_\_

Hour: \_\_\_\_\_

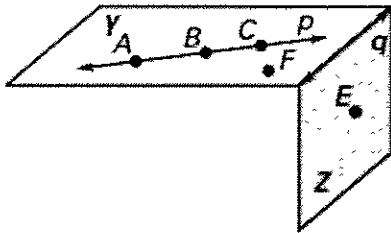
1. Name three points that are collinear.



2. Name three points that are collinear.



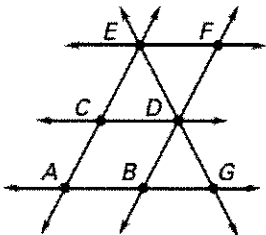
3. Name three points that are not collinear.



4. A desktop is most similar to what geometric figure?

5. A street is most similar to what geometric figure?

Refer to the figure for questions 6-8.

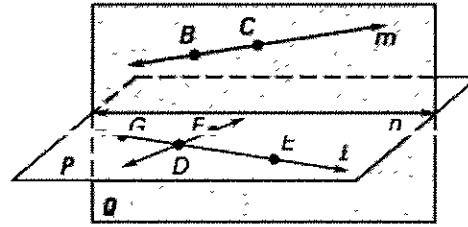


6. Name the intersection of  $\overleftrightarrow{AG}$  and  $\overleftrightarrow{DE}$

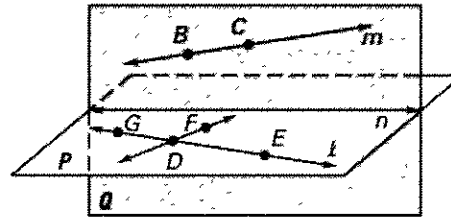
7. Name the intersection of  $\overleftrightarrow{AB}$  and  $\overleftrightarrow{EF}$

8. Name the intersection of  $\overleftrightarrow{DE}$  and  $\overleftrightarrow{EF}$

9. Name 3 lines. Name one line with points labeled.



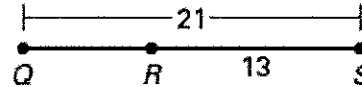
10. Name the 2 planes. Name one plane with points labeled.



11. If  $AB = 11$  and  $BC = 5$ , find  $AC$ .

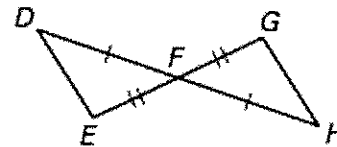


12. If  $QS = 21$  and  $RS = 13$ , find  $QR$ .



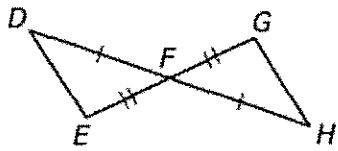
13. What does it mean for a point to be between two other points?

14. Is F between E and G?

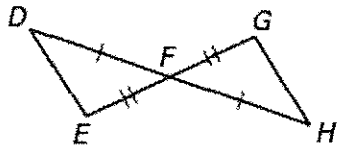


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15. Is F between D and G?



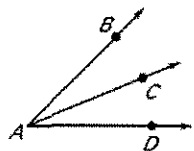
16. Is D between F and H?



17. If  $\angle WXY$  is obtuse and  $\angle WXZ$  is straight, then  $\angle YXZ$  is what kind of angle?



18. If  $m\angle CAB = 22$  and  $m\angle CAD = 26$ , then what is the  $m\angle BAD$ ?

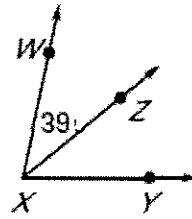


19. Find the coordinates of the midpoint of a segment with the pair of endpoints.  
S(2, 5) and A(-4, 2)

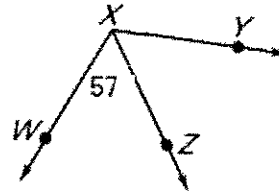
$$\text{Midpoint Formula} = \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

In 20-22  $\overrightarrow{XZ}$  bisects  $\angle WXY$ , find the measure of the angle.

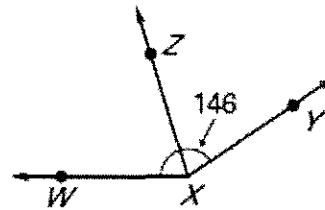
20.  $m\angle WXY$



21.  $m\angle WXY$

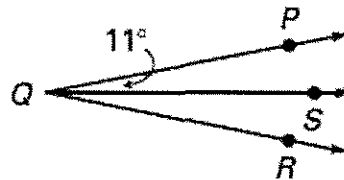


22.  $m\angle WXZ$

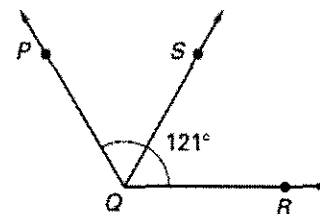


For questions 23 and 24  $\overrightarrow{QS}$  bisects  $\angle PQR$ .

23. Find the  $m\angle SQR$  and  $m\angle PQR$



24. Find the  $m\angle SQR$  and  $m\angle PQS$



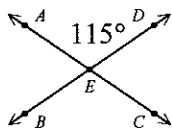
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25. Find the measure of the complement and supplement of an angle that measures  $40^\circ$ .

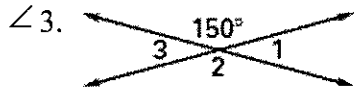
26. Find the measure of the supplement of an angle that measure  $110^\circ$ .

27. Find the measure of the complement and supplement of an angle that measures  $85^\circ$ .

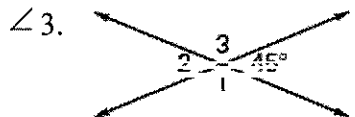
28. Line segments  $AC$  and  $BD$  intersect at  $E$ .  $m\angle AED = 115^\circ$ . What is the measure of  $\angle BEC$ ?



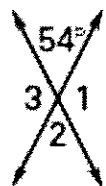
28. Find the measures of  $\angle 1$ ,  $\angle 2$ , and  $\angle 3$ .



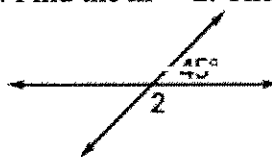
29. Find the measures of  $\angle 1$ ,  $\angle 2$ , and  $\angle 3$ .



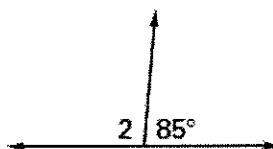
30. Find the measures of  $\angle 1$ ,  $\angle 2$ , and  $\angle 3$ .



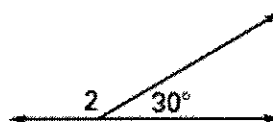
31. Find the  $m\angle 2$ . The diagram is not to scale.



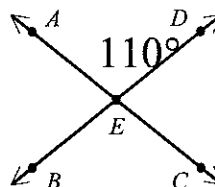
32. Find the  $m\angle 2$ . The diagram is not to scale.



33. Find the  $m\angle 2$ . The diagram is not to scale.

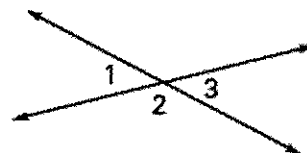


34. In the figure shown, Are the following statements true or false?



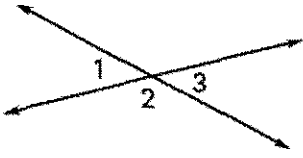
- $\angle BEC$  and  $\angle CED$  are adjacent angles.
- $\angle AEB$  and  $\angle DEC$  are vertical angles.
- $m\angle BEC = 70$
- $m\angle AEB = 70$

35. In the figure below, what would be the correct pair name for angle 1 and 3.

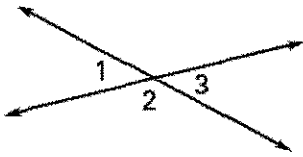


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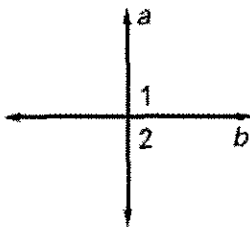
36. In the figure below, what would be the correct pair name for angle 1 and 2.



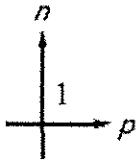
37. In the figure below, what would be the correct pair name for angle 2 and 3.



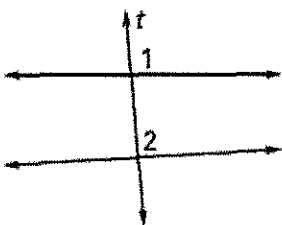
38. Given that  $a \perp b$ . What is the measure of angle 1.



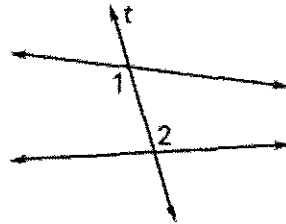
39. Given that the 2 lines are perpendicular. What is the measure of angle 1.



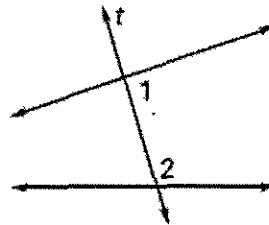
40. Describe the relationship between  $\angle 1$  and  $\angle 2$ .



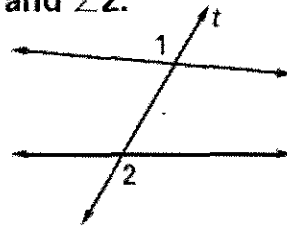
41. Describe the relationship between  $\angle 1$  and  $\angle 2$ .



42. Describe the relationship between  $\angle 1$  and  $\angle 2$ .



43. Describe the relationship between  $\angle 1$  and  $\angle 2$ .



44. If two parallel lines are cut by a transversal, then the alternate interior angles are \_\_\_\_\_.

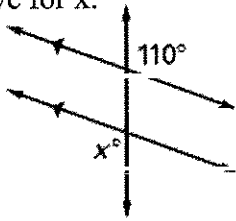
45. If two parallel lines are cut by a transversal, then the alternate exterior angles are \_\_\_\_\_.

46. If two parallel lines are cut by a transversal, then the same side interior angles are \_\_\_\_\_.

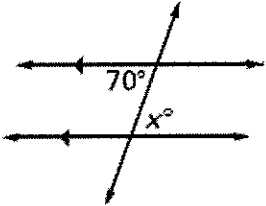
47. If two parallel lines are cut by a transversal, then the corresponding interior angles are \_\_\_\_\_.

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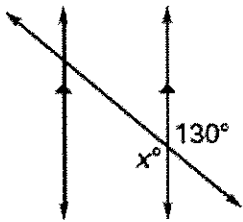
48. Solve for x.



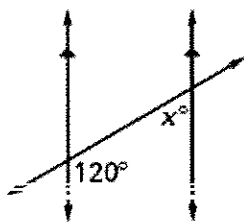
49. Solve for x.



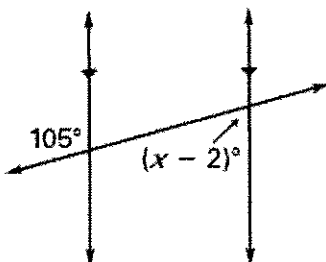
50. Solve for x.



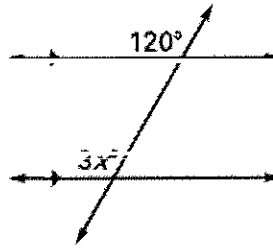
51. Solve for x.



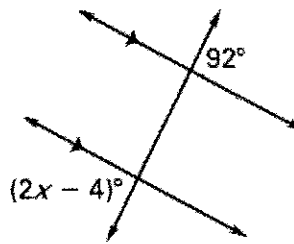
52. Solve for x.



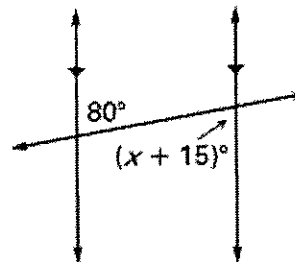
53. Solve for x.



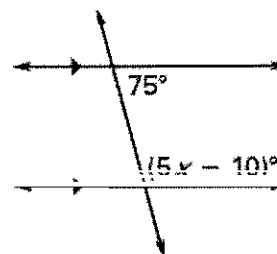
54. Solve for x.



55. Solve for x.



56. Solve for x.



57. Solve for x.

