Honors Geometry Chapter 1 Practice Test 1

Put all answers in the blank to the left of the question.

1. What is the distance from (1, 2) to (3, 6)?

2. If $\angle A$ and $\angle B$ are vertical angles with $\angle A = 2n + 60$ and $\angle B = 4n + 20$, what is the measurement of $\angle B$?

3. Which of these statements is false?
   A. $\overline{AB} = \overline{BA}$
   B. $\overline{AB} = \overline{BA}$
   C. $\overline{AB} = \overline{BA}$

4. If C is between X and Y with YC = 6 and XY = 10, what is XC?

5. $\overrightarrow{BX}$ bisects $\angle ABC$. If $\angle ABX = 30^\circ$, what is $\angle ABC$?

6. If D is between A and B with $AB = 5n$ and BD = n, what is AD?

7. If $\angle A$ and $\angle B$ are complementary angles with $\angle A = 2n + 6$ and $\angle B = 3n + 4$, what is the measurement of $\angle B$?

8. If D is between A and B with $AB = 4n + 10$ and AD = n $- 2$, what is BD?

9. If V is between R and Y with RY = 30 and VY = n + 10, what is RV?

10. What is the distance from (-1, 2) to (3, -1)?

11. What is the midpoint of a line that has endpoints at (2, 3) and (4, 7)?

12. If $\angle A$ and $\angle B$ are supplementary angles with $\angle A = 70^\circ$, what is the measurement of $\angle B$?

13. What is the midpoint of a line that has endpoints at (-2, -3) and (4, 7)?

14. If X is the midpoint of $\overline{CN}$ and CX = $6n + 2$, what is CN?

15. If X is the midpoint of $\overline{AB}$ and $AB = 8n + 6$, what is XB?

16. If you walk 5 miles due East and then walk 12 miles due North, how far from the starting point are you?

17. Think about a square whose side length is 16 cm. What is the length of the diagonal? (Draw a picture to help you.)

18. What is the distance from (-3, 4) to (0, 14)?

19. If three points all lie on a line, the points are said to be what?

20. If D is between A and B with AD = $12n + 1$ and DB = n + 2, what is AB?
Consider the picture below. \( \overline{BD} \) bisects \( \angle EBC \), \( \overline{BE} \) bisects \( \angle FBC \), and \( \angle ABC \) is a straight line.

21. If \( \angle EBC = 6n - 8 \), what is \( \angle EBD \)?

22. If \( \angle EBD = 4n + 16 \) and \( \angle DBC = 6n + 10 \), what is the numerical value of \( \angle EBC \)?

23. If \( \angle FBE = 80^\circ \), what is the measurement of \( \angle EBD \)?

24. If \( \angle EBC = 2n + 6 \) and \( \angle FBE = 4n - 54 \), what is the numerical value of \( \angle DBC \)?

25. If \( \angle EBD = 2n + 6 \) and \( \angle EBC = 8n - 4 \), what is the numerical value of \( \angle DBC \)?

26. Point A is at (1, 10) and B is at (4, 1). If B is the midpoint of \( \overline{AC} \), what are the coordinates of C?

27. If \( \angle A \) and \( \angle B \) are complementary angles with \( \angle A = 4n + 80^\circ \), what is the measurement of \( \angle B \)? (Expression Answer)

28. If \( A = (7, 15) \) and \( B = (5, 10) \), what is AB?

29. If C is between X and Y with CX = 8n - 4 and CY = n + 10, what is XY?

30. If B is between N and Y with BN = 2n - 1 and NY = 6n + 5, what is BY?

31. If \( \angle A \) and \( \angle B \) are a linear pair with \( \angle A = n + 40 \) and \( \angle B = 9n + 20 \), what is the measurement of \( \angle B \)?

Find the value of the missing side in each right triangle below. Round answers to nearest tenth.

32. \( 8 \text{ cm} \) \( 4 \text{ cm} \)
   \( x = \) ________

33. \( 13 \text{ cm} \) \( 5 \text{ cm} \)
   \( x = \) ________

34. \( 8 \text{ cm} \)
   \( x = \) ________

35. \( 41 \text{ cm} \)
   \( x = \) ________
For 36-40, find the value of $n$.

__________36. On $\overline{AC}$, $B$ is the midpoint with $AB = 2n + 3$ and $BC = 5n - 9$.

__________37. Let $N$ be the midpoint of $\overline{AD}$ with $AD = 8n - 10$ and $AN = 3n - 1$.

__________38. Let $B$ be the midpoint of $\overline{VC}$ with $VB = 2n + 3$ and $VC = 6n - 2$.

__________39. On $\overline{AX}$, $N$ is the midpoint with $AN = 8$ and $AX = 4n - 12$.

__________40. Let $C$ be the midpoint of $\overline{BN}$ with $BN = 8n - 1$ and $BC = 2n + 5$.

Give the perimeter (circumference for a circle) and area of each of the given shapes.

41.  
42.  
43.  
44.  
45.  
46.  
47.  

48. Consider a stop sign. Circle your answers below.
   Is it convex or concave?  convex  concave
   Is it regular or irregular?  regular  irregular
   What type of polygon is it?  pentagon  hexagon  octagon  nonagon