# Geometry Chapter 1 Practice Test 1

Name _____

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. $\overrightarrow{AB} = \overrightarrow{BA}$ 　　　　　　 B. $\overline{AB} = \overline{BA}$ 　　　　　　 C. $\overrightarrow{AB} = \overrightarrow{BA}$

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

_____ 5. $\overrightarrow{BX}$ bisects $\angle ABC$. If $\angle ABX = 30°$, 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 $\angle A = 70°$, 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. $\overrightarrow{BD}$ bisects $\angle EBC$, $\overrightarrow{BE}$ bisects $\angle FBC$, and $\angle ABC$ is a straight line.
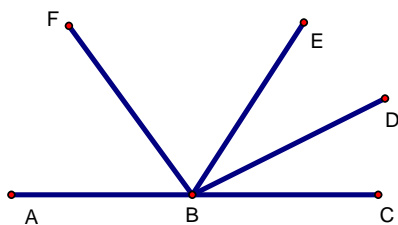
_____ 21. If $\angle EBC = 6n - 8$, what is $\angle EBD$?

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

_____ 23. If $\angle FBE = 80°$, 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. 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?

_____ 26. If $\angle A$ and $\angle B$ are complementary angles with $\angle A = 80°$, what is the measurement of $\angle B$?

_____ 27. If A = (7, 15) and B = (5, 10), what is AB?

_____ 28. If C is between X and Y with CX = 8n – 4 and CY = n + 10, what is XY?

_____ 29. If B is between N and Y with BN = 2n – 1 and NY = 6n + 5, what is BY?

_____ 30. 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.

31.

8 cm   x   4 cm

x = _____

32.

13 cm   5 cm   x

x = _____

33.

8 cm   x   8 cm

x = _____

34.

40 cm   41 cm   x   40 cm

x = _____