# Geometry Chapter 1 Practice Test 2

Name _____

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

_____ 1. What is the distance from (3, 5) to (7, 6)?

_____ 2. If D is between A and B with AB = 4n and BD = 3 , what is AD?

_____ 3. What is the midpoint of a line that has endpoints at (8, 7) and (1, 6)?

_____ 4. If C is between X and Y with YC = 3 and XY = 12, what is XC?

_____ 5. $\overrightarrow{BX}$ bisects $\angle ABC$. If $\angle ABC = 40°$, what is $\angle ABX$?

_____ 6. Point A is at (3, 1) and B is at (4, -1). If B is the midpoint of $\overline{AC}$, what are the coordinates of C?

_____ 7. If $\angle A$ and $\angle B$ are complementary angles with $\angle A = n + 6$ and $\angle B = 8n - 6$, what is the measurement of $\angle A$?

_____ 8. If D is between A and B with AB = 3n + 8 and AD = 2n – 2 , what is BD?

_____ 9. If B is between A and C with AC = 6n and BC = n + 1, what is AB?

_____ 10. What is the distance from (-4, -2) to (-3, -1)?

_____ 11. If you walk 8 miles due West and then walk 14 miles due South, how far from the starting point are you?

_____ 12. If $\angle A$ and $\angle B$ are supplementary angles with $\angle A = 1°$, what is the measurement of $\angle B$?

_____ 13. What is the midpoint of a line that has endpoints at (-5, -1) and (-7, 7)?

_____ 14. If X is the midpoint of $\overline{CN}$ and CX = 8n + 20, what is CN?

_____ 15. If X is the midpoint of $\overline{AB}$ and AB = 4n + 12, what is XB?

_____ 16. What is the diagonal length of a rectangle that has a side length of 12 cm and a width of 4 cm?

_____ 17. If A = (3, 5) and B = (5, 15), what is AB?

_____ 18. $\overrightarrow{BX}$ bisects $\angle ABC$. If $\angle ABC = 6n + 2$, what is $\angle ABX$?

_____ 19. If B is the midpoint of $\overline{AC}$ with AB = 5n – 2 and BC = 3n + 8, what is n?

_____ 20. If a right triangle has legs of 20 cm and 21 cm, what is the hypotenuse?

Consider the picture below. $\overrightarrow{BD}$ bisects $\angle EBC$, $\overrightarrow{BE}$ bisects $\angle FBC$, and $\angle ABC$ is a straight line.
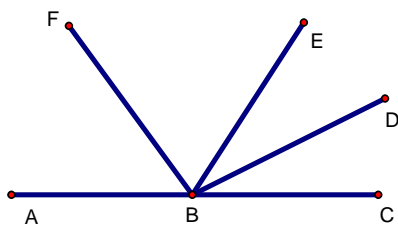
_____ 21. If $\angle DBC = 21°$, what is the measurement of $\angle FBC$?

_____ 22. If $\angle EBD = 4n + 16$ and $\angle DBC = 8n + 12$, what is the numerical value of $\angle EBC$?

_____ 23. If $\angle EBC = 10n + 4$, what is $\angle EBD$?

_____ 24. If $\angle EBC = 2n + 6$ and $\angle FBE = 3n - 24$, what is the numerical value of $\angle DBC$.

_____ 25. If $\angle A$ and $\angle B$ are vertical angles with $\angle A = 5n - 3$ and $\angle B = 3n + 13$, what is $\angle A$?

_____ 26. If C is between X and Y with CX = 6n − 4 and CY = 2n + 1, what is XY?

_____ 27. 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 $\angle B$?

_____ 28. If $\angle A$ and $\angle B$ are supplementary 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.

29.

8 cm   x

6 cm

x = _____

30.

41 cm   x

40 cm

x = _____

31.

6 cm   x

5 cm

x = _____

32.

x

5 cm   13 cm   5 cm

x = _____