

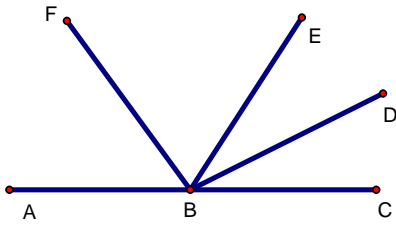
# Geometry Chapter 1 Practice Test 2 (2019)

Name \_\_\_\_\_

Put all answers in the blank to the left of the question. Round all answers to the tenths spot.

- \_\_\_\_\_ 1. What is the distance from (5, 2) to (1, 9)?
- \_\_\_\_\_ 2. If  $\angle 1$  and  $\angle 2$  are vertical angles with  $\angle 1 = 8n + 7$  and  $\angle 2 = 6n + 19$ , what is the measurement of  $\angle 2$ ?
- \_\_\_\_\_ 3. If A is the midpoint of  $\overline{CT}$  with C = (3, 4) and T = (7, 14), what is A?
- \_\_\_\_\_ 4. What is the distance between (2, 4) and (10, 18)?
- \_\_\_\_\_ 5.  $\overline{BX}$  bisects  $\angle ABC$ . If  $\angle ABC = 50^\circ$ , what is  $\angle ABX$ ?
- \_\_\_\_\_ 6. On  $\overline{AB}$ , F is the midpoint. If A = (3, 4) and F = (5, 1), where is B?
- \_\_\_\_\_ 7. If  $\angle 1$  and  $\angle 2$  are complementary angles with  $\angle 1 = 2n + 11$  and  $\angle 2 = 3n + 9$ , what is the measurement of  $\angle 2$ ?
- \_\_\_\_\_ 8. On  $\overline{AB}$ , C is the midpoint. If A = (5, 1) and C = (6, 6), where is B?
- \_\_\_\_\_ 9. On  $\overline{TD}$ , M is the midpoint. If T = (12, 4) and D = (6, 8), where is M?
- \_\_\_\_\_ 10. What is the distance from (-1, -2) to (-3, -1)?
- \_\_\_\_\_ 11. What is the midpoint of a line that has endpoints at (12, 30) and (4, 6)?
- \_\_\_\_\_ 12. If  $\angle 1$  and  $\angle 2$  are supplementary angles with  $\angle 1 = 10^\circ$ , what is the measurement of  $\angle 2$ ?
- \_\_\_\_\_ 13. What is the midpoint of a line that has endpoints at (-2, 8) and (-4, -6)?
- \_\_\_\_\_ 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  $AB = 6n + 14$ , what is XB?
- \_\_\_\_\_ 16. If you walk 9 miles due East and then walk 3 miles due North, how far from the starting point are you?
- \_\_\_\_\_ 17. Think about a square whose side length is 12 cm. What is the length of the diagonal? (Draw a picture to help you.)
- \_\_\_\_\_ 18. What is the distance from (-3, 4) to (4, 8)?
- \_\_\_\_\_ 19. If three points all lie on a plane, the points are said to be what?
- \_\_\_\_\_ 20. If the sides of a triangle are 6, 9, and 12, is it a right triangle?

Consider the picture below.  $\overline{BD}$  bisects  $\angle EBC$ ,  $\overline{BE}$  bisects  $\angle FBC$ , and  $\angle ABC$  is a straight line.



- \_\_\_\_\_ 21. If  $\angle EBC = 40^\circ$ , what is  $\angle EBD$ ?
- \_\_\_\_\_ 22. If  $\angle EBD = 12^\circ$ , what is  $\angle EBC$ ?
- \_\_\_\_\_ 23. If  $\angle FBE = 60^\circ$ , what is  $\angle EBD$ ?
- \_\_\_\_\_ 24. If  $\angle FBE = 40^\circ$ , what is  $\angle DBC$ ?
- \_\_\_\_\_ 25. Point A is at (2, 1) and B is at (4, -1). If B is the midpoint of  $\overline{AC}$ , what are the coordinates of C?
- \_\_\_\_\_ 26. If  $\angle 1$  and  $\angle 2$  are complementary angles with  $\angle 1 = 50^\circ$ , what is the measurement of  $\angle 2$ ?
- \_\_\_\_\_ 27. If A = (2, 17) and B = (8, 10), what is AB?
- \_\_\_\_\_ 28. Is a triangle with side lengths of 65, 33, and 56 a right triangle?
- \_\_\_\_\_ 29. If A = (2, -8) and B = (9, 8), what is AB?
- \_\_\_\_\_ 30. If  $\angle 1$  and  $\angle 2$  are a linear pair with  $\angle 1 = n + 80$  and  $\angle 2 = 9n - 20$ , what is the measurement of  $\angle 2$ ?

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

