# Geometry Chapter 1 Practice Test 1 (2019)

Name _____

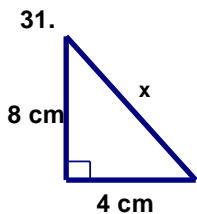**Put all answers in the blank to the left of the question.**

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

_____ 2. If $\angle 1$ and $\angle 2$ are vertical angles with $\angle 1 = 2n + 60$
and $\angle 2 = 4n + 20$, what is the measurement of $\angle 2$?

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

_____ 4. What is the midpoint between (2, 4) and (10, 18)?

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

_____ 6. On $\overline{AB}$, F is the midpoint. If A = (2, 4) and F = (5, 10), where is B?

_____ 7. If $\angle 1$ and $\angle 2$ are complementary angles with $\angle 1 = 2n + 6$
and $\angle 2 = 3n + 4$, what is the measurement of $\angle 2$?

_____ 8. On $\overline{AB}$, C is the midpoint. If A = (9, 1) and C = (7, 6), where is B?

_____ 9. On $\overline{TD}$, M is the midpoint. If T = (2, 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 (2, 3) and (4, 7)?

_____ 12. If $\angle 1$ and $\angle 2$ are supplementary angles with $\angle 1 = 70°$, what is
the measurement of $\angle 2$?

_____ 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 the sides of a triangle are 61, 11, and 60, is it a right triangle?

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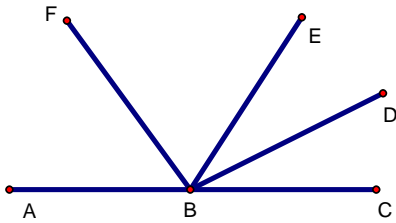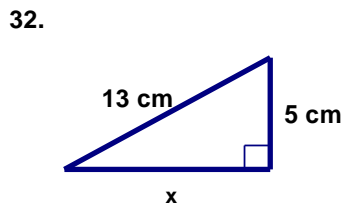

_____   21.   If $\angle EBC = 60°$, what is $\angle EBD$?

_____   22.   If $\angle EBD = 16°$, what is $\angle EBC$?

_____   23.   If $\angle FBE = 80°$, what is $\angle EBD$?

_____   24.   If $\angle FBE = 60°$, what is $\angle DBC$?

_____   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 $\angle 1$ and $\angle 2$ are complementary angles with $\angle 1 = 80°$, what is the measurement of $\angle 2$?

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

_____   28.   Is a triangle with side lengths of 11, 12, and 15 a right triangle?

_____   29.   If A = (2, -1) and B = (5, 3), what is AB?

_____   30.   If $\angle 1$ and $\angle 2$ are a linear pair with $\angle 1 = n + 40$ and $\angle 2 = 9n + 20$, what is the measurement of $\angle 2$?
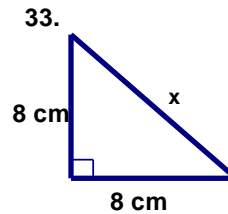
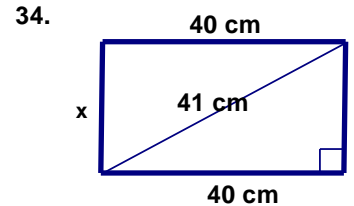Find the value of the missing side in each right triangle below. Round answers to nearest tenth.

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 = _____