

Geometry Practice Test - Unit 1
Points, Lines, Planes and Angles

☺ Name: _____ ☺
Date: _____ Pd: _____

Definitions (1 - 4)

1) Angle

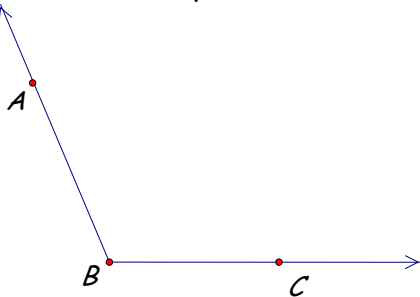
2) Acute angle

3) Angle bisector

4) Complementary angles

5) In $\angle ABC$, point B is called the _____.

6) Name the angle in three ways.

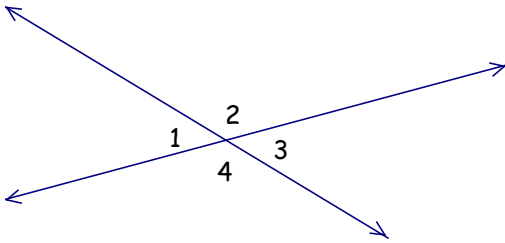


7) Write the meaning of the symbol \overline{AB} in word form.

8) Write the Segment Addition Postulate.

9) Write the Distance Formula.

10) Name a pair of vertical angles. Vertical angles are _____.

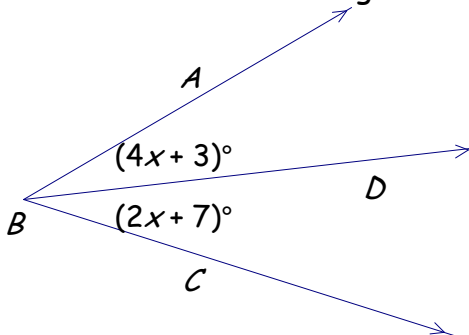


11) Find the coordinates of the midpoint of a segment with $A(2, 3)$ and $B(4, 5)$ as endpoints.

12) The midpoint of \overline{XY} is $M(2, 4)$. One endpoint, X , is at $(-1, 7)$. Find the coordinate of the other endpoint, Y .

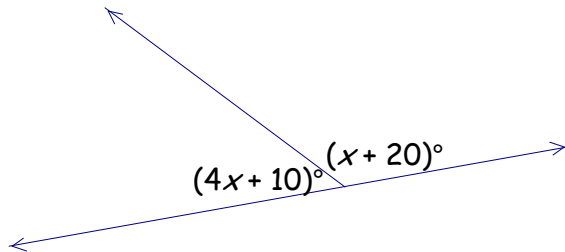
13) If the $m\angle XYZ = 130^\circ$ and \overline{YP} bisects $\angle XYZ$, find $m\angle PYZ$.

14) Find the value of x if \overline{BD} is the angle bisector of $\angle ABC$.



15) If $m\angle Q = 70^\circ$, find the value of x , if its complement is given by $(5x + 10)^\circ$.

16) Given the linear pair, find the value of x .

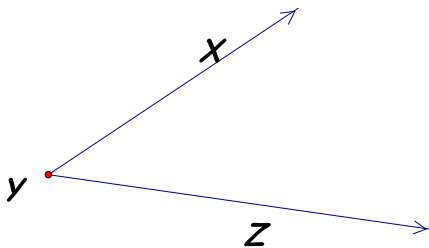


17) Q is between P and R on \overline{PR} , $PQ = (2w - 3)$, $QR = (4 + w)$, and $PR = 34$. Find the value of w .

18) Find the distance between $(1, 4)$ and $(6, 16)$.

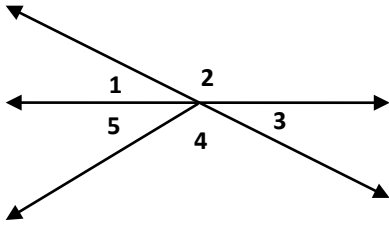
19) If two planes intersect, their intersection is a _____.

20) Bisect the given angle.



Semester Exam Review

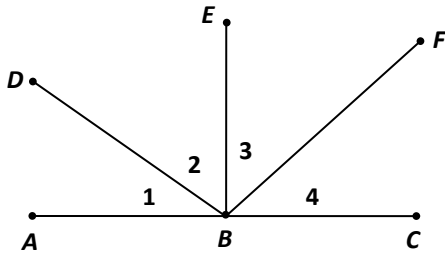
21. Use the figure below.



Which best describes the pair of angles $\angle 1$ and $\angle 3$?

- A. adjacent
- B. complementary
- C. linear pair
- D. vertical

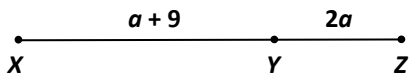
22. Use the diagram below.



Which best describes the pair of angles $\angle 2$ and $\angle 3$?

- A. adjacent
- B. complementary
- C. linear pair
- D. right

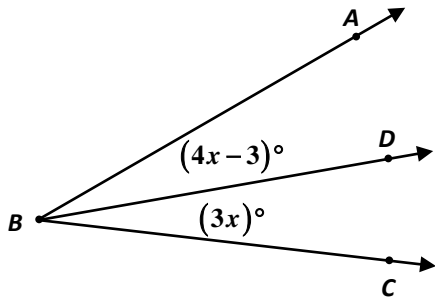
23. In the figure below, Y is between X and Z , and $XZ = 30$ cm.



What is the value of a ?

- A. 7
- B. 9
- C. 13
- D. 19

24. In the diagram below, $m\angle ABC = 46^\circ$.



What is the value of x ?

- A. $6\frac{1}{7}$
- B. 7
- C. 10
- D. $10\frac{2}{3}$

25. What is the distance between points $A(6,-1)$ and $B(-2,-1)$?

- A. $2\sqrt{2}$
- B. $2\sqrt{5}$
- C. 4
- D. 8

26. What are the coordinates of the midpoint of the segment joining the points $A(-4,-2)$ and $B(3,4)$?

- A. $\left(-\frac{1}{2}, -3\right)$
- B. $\left(-\frac{1}{2}, 1\right)$
- C. $\left(\frac{1}{2}, 1\right)$
- D. $\left(3\frac{1}{2}, 3\right)$

27. When $\triangle ABC$ is constructed with vertices $A(-3,2)$, $B(6,4)$, and $C(3,-1)$, what is the length of \overline{AC} ?
- A. $\sqrt{5}$
 - B. $\sqrt{34}$
 - C. $\sqrt{45}$
 - D. $\sqrt{85}$

NHSPE Review

28. Ashton and Catherine are both leaving the same school and are both headed to the local library. Ashton leaves the school and walks 1 mile south and .75 mile west. Catherine leaves the school and travels straight on the road that goes directly to the library. How much longer is Ashton's route than Catherine's route?

