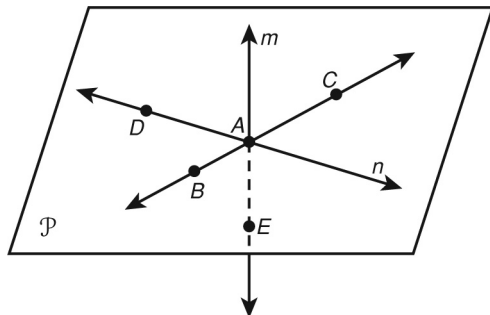


Foundations for Geometry

Chapter Test *Form B*

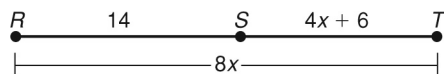
Circle the best answer.

Use the figure for Exercises 1–4.



1. What is another name for plane \mathcal{P} ?
 A plane AE C plane BAD
 B plane A D plane BAC
2. Which segment is on line n ?
 F \overline{AD} H \overline{AC}
 G \overline{BC} J \overline{BE}
3. Which is the name of a ray with endpoint A ?
 A \overline{DA} C \overline{CA}
 B \overline{BC} D \overline{AB}
4. Name the intersection of plane \mathcal{P} and line m .
 F line n H AC
 G point A J \overline{AE}

5. What is the measure of \overline{RT} ?

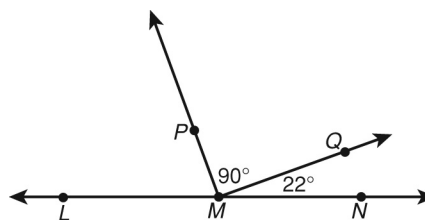


- A 5 C 26
 B 16 D 40

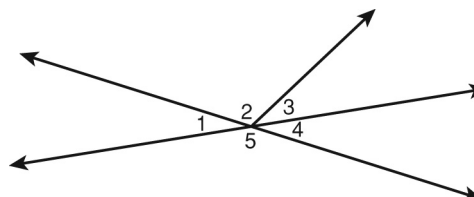
6. Given $LM = MP$ and $L, M,$ and P are collinear, which of the following BEST describes the relationship of $L, M,$ and P ?

- F $\overline{LM} \cong \overline{MP}$
 G M is the midpoint of \overline{LP} .
 H M bisects \overline{LP} .
 J All of the above

Use the figure for Exercises 7 and 8.



7. Which term describes $\angle PMQ$?
 A obtuse C right
 B straight D acute
8. What is $m\angle PMN$?
 F 22° H 68°
 G 90° J 112°
9. Which angles are adjacent and form a linear pair?



- A $\angle 1$ and $\angle 2$ C $\angle 2$ and $\angle 3$
 B $\angle 3$ and $\angle 4$ D $\angle 1$ and $\angle 5$

10. If $m\angle A = (4x + 2)^\circ$, what is the measure of the complement of $\angle A$?

- F 90° H $(178 - 4x)^\circ$
 G $(4x + 92)^\circ$ J $(88 - 4x)^\circ$

Foundations for Geometry

Chapter Test *Form B continued*

11. If $m\angle B = (3x - 16)^\circ$, what is the measure of the supplement of $\angle B$?

- A 180° C $(164 - 3x)^\circ$
 B $(196 - 3x)^\circ$ D $(16 - 3x)^\circ$

12. What is the perimeter of a square whose side is 8.2 centimeters?

- F 16.4 cm H 32.8 cm^2
 G 32.8 cm J 67.24 cm^2

13. What is the area of a triangle with a height of 3 inches and a base of 5.5 inches?

- A 8.25 in^2 C 16.5 in.
 B 8.5 in^2 D 16.5 in^2

14. A circle has a diameter of 8 feet. What is its approximate area?

- F 12.56 ft^2 H 50.24 ft^2
 G 25.12 ft^2 J 200.96 ft^2

15. Given \overline{GH} with endpoints $G(-11, 4)$ and $H(-1, -9)$, what are the coordinates of the midpoint of \overline{GH} ?

- A $(-12, -5)$ C $(-10, 13)$
 B $(-6, -2.5)$ D $(-5, 6.5)$

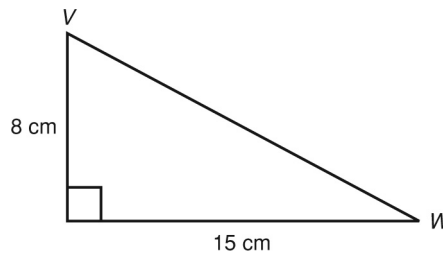
16. M is the midpoint of \overline{RS} . R has coordinates $(-12, 4)$, and M has coordinates $(1, -2)$. What are the coordinates of S ?

- F $(-5.5, -1)$ H $(13, 6)$
 G $(-11, 2)$ J $(14, -8)$

17. What is the distance from $M(-1, 6)$ to $N(11, 1)$?

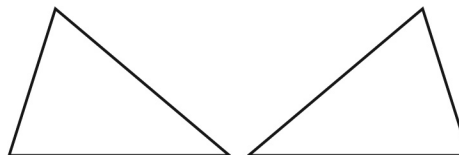
- A 12 units C 13 units
 B $\sqrt{149}$ units D 169 units

18. What is the distance from V to W ?



- F 17 cm H 120 cm
 G 23 cm J 289 cm

19. What transformation is shown?



- A rotation C translation
 B reflection D image

20. Given a point in the coordinate plane, the rule $(x, y) \rightarrow (x + 2, y - 3)$ translates the point in which direction?

- F 2 units to the left and 3 units up
 G 3 units to the left and 2 units down
 H 3 units right and 2 units up
 J 2 units to the right and 3 units down