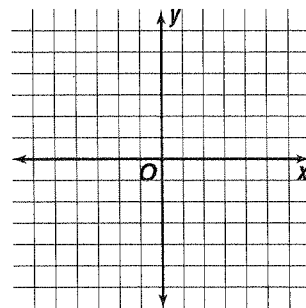


Chapter 1 Test, Form 2C

Graph each point in Questions 1 and 2 on the coordinate plane at the right.

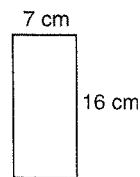
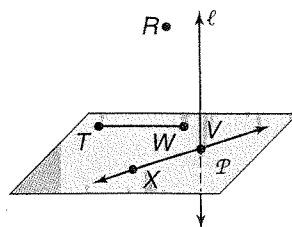
1. $C(-3, -4)$
2. $G(5, 2)$

1-2.



Refer to the figure below for Questions 3-7.

3. Name the intersection of \overleftrightarrow{XV} and plane \mathcal{P} .
4. If \overleftrightarrow{RW} and \overleftrightarrow{RX} were drawn, what would be their intersection?
5. Name the intersection of line ℓ and \overleftrightarrow{TW} .
6. Name four noncoplanar points.
7. Write another name for plane \mathcal{P} .
8. Find the perimeter and area of the figure at the right.



3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Refer to the number line below for Questions 9 and 10.



9. Find AC .
10. Find $AC - BD$.
11. Find the length of the segment with endpoints $L(14, 15)$ and $N(9, 3)$.

9. _____
10. _____
11. _____

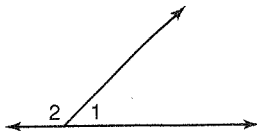
Determine whether each statement in Questions 12-14 is true or false.

12. If Q is between S and X , then $SQ = QX - SX$.
13. If K is the midpoint of \overline{BF} , then $KF = FB$.
14. The bisector of a segment always intersects the segment at its midpoint.
15. Find the coordinates of the midpoint of segment MN given $M(5, 5)$ and $N(9, 3)$.

12. _____
13. _____
14. _____
15. _____

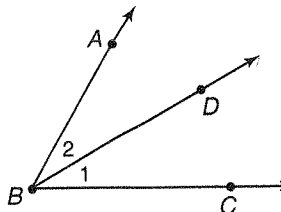
Chapter 1 Test, Form 2C (continued)

16. Find $m\angle 2$ if $m\angle 2 = 3x + 4$ and $m\angle 1 = x$.



16. _____

17. Find $m\angle ABC$ if \overrightarrow{BD} bisects $\angle ABC$, $m\angle 1 = 2x - 30$, and $m\angle 2 = 5x - 120$.



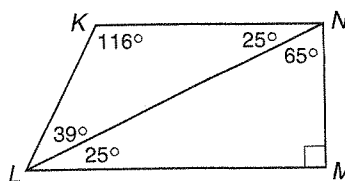
17. _____

18. You are enclosing a garden with prefabricated fencing you salvaged from a landfill. You found 20 pieces of fence that are each 1 meter long. What is the maximum rectangular area you can enclose with these pieces of fence?

18. _____

Refer to the figure below for Questions 19–21.

19. Name two right angles.
20. Name two congruent angles that are not right angles.
21. Name the obtuse angle.

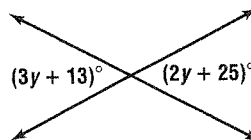


19. _____

20. _____

21. _____

22. The measure of an angle is half the measure of its supplement. Find the measure of the angle.



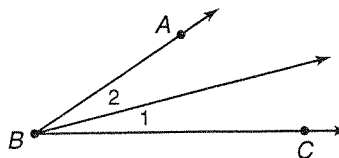
22. _____

23. Find the value of y in the figure at the right.

23. _____

Refer to the figure below for Questions 24 and 25.

24. Find $m\angle 1$ if $m\angle 2 = 32$ and $m\angle ABC = 51$.
25. Find the value of x if $m\angle ABC = 83$, $m\angle 1 = 3x + 2$, and $m\angle 2 = x - 7$.



24. _____

25. _____

Bonus

Triangle DEF has vertices $D(4, 2)$, $E(-2, 0)$, and $F(6, -4)$. Find the coordinates of the vertices of the triangle formed by connecting the midpoints of the sides of triangle DEF .

Bonus _____