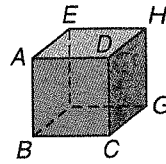


Chapter 3 Test, Form 2C

1. Consider the three-dimensional figure shown at the right. How many pairs of skew segments are shown?



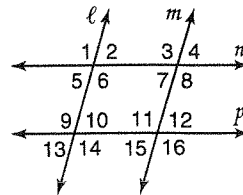
1. _____

2. Draw two perpendicular planes with one line intersecting them.

2. _____

Refer to the figure below. State the transversal that forms each pair of angles. Then identify the special angle pair named.

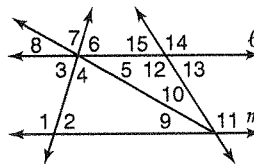
3. $\angle 5$ and $\angle 7$
4. $\angle 1$ and $\angle 8$
5. $\angle 10$ and $\angle 15$
6. $\angle 6$ and $\angle 10$



3. _____
 4. _____
 5. _____
 6. _____

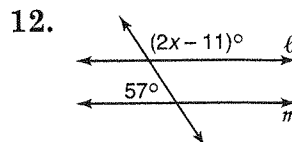
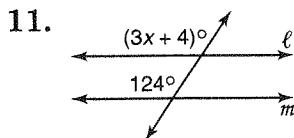
In the figure below, $\ell \parallel m$, $m\angle 1 = 110$, and $m\angle 11 = 2(m\angle 2)$. Find the measure of each angle.

7. $\angle 11$
8. $\angle 3$
9. $\angle 13$
10. $\angle 14$



7. _____
 8. _____
 9. _____
 10. _____

Find the value of x so that $\ell \parallel m$.



11. _____
 12. _____

Chapter 3 Test, Form 2C (continued)

13. Tell whether a line whose slope is 0 is horizontal, vertical, or neither.

13. _____

Find the slope of the line passing through the given points.

14. $A(4, 1), B(2, 0)$

14. _____

15. $C(2, -1), D(4, 2)$

15. _____

16. $E(6, -6), F(4, 8)$

16. _____

Find the slope of a line parallel to the line passing through the given points.

17. $G(-8, 2), H(-3, 12)$

17. _____

18. $J(3, 2), K(-1, -1)$

18. _____

19. $M(-5, 1), N(0, -7)$

19. _____

Find the slope of a line perpendicular to the line passing through the given points.

20. $P(6, 1), Q(8, 0)$

20. _____

21. $R(3, -3), S(-1, 5)$

21. _____

22. $T(5, 0), U(0, 4)$

22. _____

23. Draw and label a figure that shows two intersecting planes with a line intersecting both planes.

23. _____

For each property listed from plane Euclidean geometry, write a corresponding statement for non-Euclidean spherical geometry.

24. If three points are collinear, exactly one point is between the other two.

24. _____

25. Perpendicular lines form four right angles.

25. _____

Bonus

Fill in the blank to make a true statement: If one of the angles formed by two parallel lines and a transversal has a measure of 90° , then the measure of any of the other angles must be _____.

Bonus _____