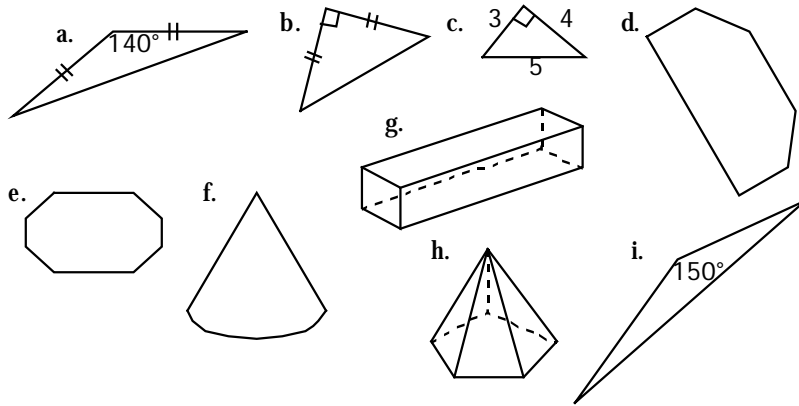


NAME: _____ PERIOD: _____ DATE: _____

TRUE-FALSE: Identify each statement as (T) rue or (F)alse.

1. _____ The ray from R through points P or Q is written in symbolic form as \overrightarrow{RQ} or \overrightarrow{RP} .
2. _____ The vertex of angle ABC is point A .
3. _____ An obtuse angle is an angle whose measure is more than 180° .
4. _____ An isosceles triangle is a triangle with no two sides the same length.
5. _____ A diagonal is a line segment in a polygon connecting any two vertices.
6. _____ If \overline{AB} intersects \overline{CD} at point P , then $\angle APC$ and $\angle BPD$ are a pair of vertical angles.
7. _____ If the sum of the measures of two angles is 90° , then the two angles are supplementary.
8. _____ An angle bisector in an acute triangle is a line segment connecting a vertex with the midpoint of the opposite side.
9. _____ A trapezoid is a quadrilateral having exactly one pair of equal length sides.
10. _____ A parallelogram is a quadrilateral with all the angles equal in measure.
11. _____ If two parallel lines are cut by a transversal then the alternate exterior angles are complementary.
12. _____ If two angles are vertical angles, then they are congruent.
13. _____ You can determine the midpoint of a segment if you are given only its slope.
14. _____ If you are given two unique points on a line you are able to calculate its slope.
15. _____ If two distinct lines on a graph have slopes which are reciprocals then they are perpendicular.
16. _____ If a line has slope s and y -intercept $(0, q)$ then the equation for the line is $y = sx + q$.
17. _____ The probability of rolling two dice whose sum is 3 using two 6-sided dice is 1 in 18.
18. _____ If the slope of the perpendicular bisector of \overline{AB} is $\frac{-1}{m}$, then the slope of \overline{AB} is $-m$.
19. _____ If two parallel lines are cut by a transversal, then corresponding angles are congruent, alternate interior angles are congruent, and alternate exterior angles are congruent.
20. _____ If two angles are congruent and a linear pair, then each angle must be a right angle.

GEOMETRIC FIGURES: Match each term with its lettered figure below.



21. _____ Obtuse Scalene Triangle

24. _____ Prism

22. _____ Isosceles Right Triangle

25. _____ Pyramid

23. _____ Hexagon

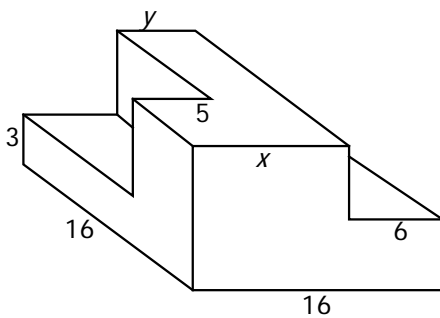
DRAWING AND MARKING FIGURES. Sketch, mark, and label each figure.

26. Trapezoid $ZOID$ with $\overline{ZO} \parallel \overline{ID}$ and $IO = ZD$.

27. Isosceles obtuse $\triangle ABC$ with $AB = BC$ and median \overline{AM} .

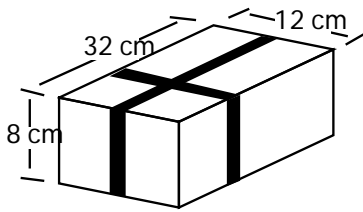
VISUAL THINKING

28. Each angle on each polygonal side of the block is a right angle. Find the length's x and y in each figure.



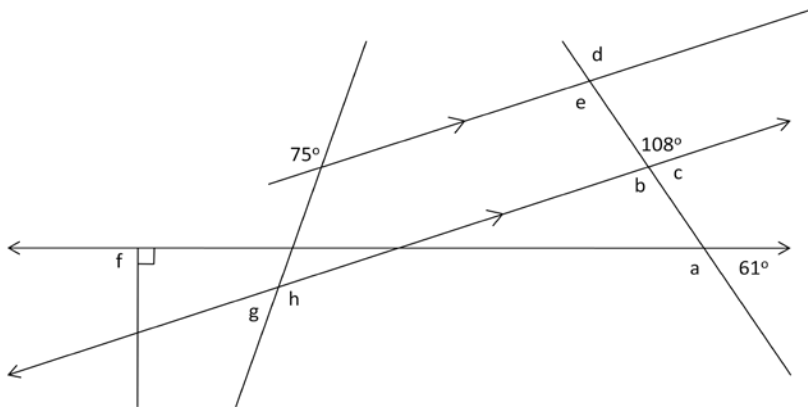
$x = \underline{\hspace{2cm}}$ $y = \underline{\hspace{2cm}}$

29. The box on the right is wrapped with two strips of ribbon as shown. What length of ribbon was needed to decorate the box?



30. At one point in a race, Sleepy was 25 feet behind Sneezy and 28 feet ahead of Doc. Doc was behind Bashful by 40 feet. Sneezy was ahead of Bashful by how many feet?

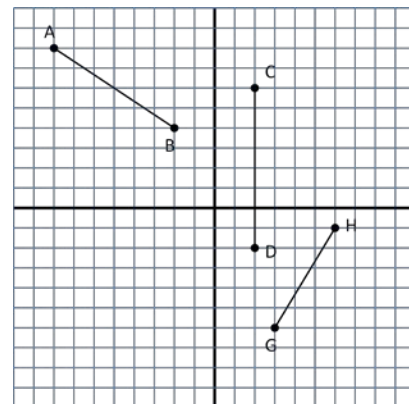
ANGLE PROPERTIES: Find the measure of each lettered angle *a–h* in the figure below.



31. $a = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$ $c = \underline{\hspace{1cm}}$ $d = \underline{\hspace{1cm}}$
 $e = \underline{\hspace{1cm}}$ $f = \underline{\hspace{1cm}}$ $g = \underline{\hspace{1cm}}$ $h = \underline{\hspace{1cm}}$

MIDPOINT & SLOPE: Find midpoint & slope for the segments.

	Slope	Midpoint
32. \overline{AB}	_____	_____
33. \overline{CD}	_____	_____
34. \overline{HG}	_____	_____



PARALLEL & PERPENDICULAR LINES: Using the given points, determine whether the lines are parallel, perpendicular, or neither. State the reason for your conclusion.

- $W(3,-1)$ $X(5,1)$ $Y(7,0)$ $Z(10,3)$

35. \overline{WX} and \overline{XY} _____

36. \overline{WX} and \overline{YZ} _____

EQUATION OF LINES

37. Write the equation of the line through the points with coordinates (1, 3) and (3, 2).

38. Write the equation of the line that is parallel to $y = 2x - 1$ and passes through the point with coordinates (3, 3).

39. Find the point of intersection of the line $y = 2x - 1$ and the line $y = -2x - 1$