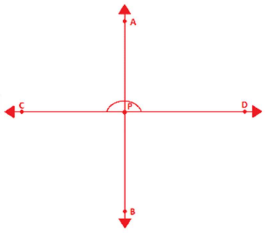
Practice Test #1 Key

(3 points each) Tell whether each statement is true or false. If the statement is false, draw a counterexample or correct the statement so that it is true.

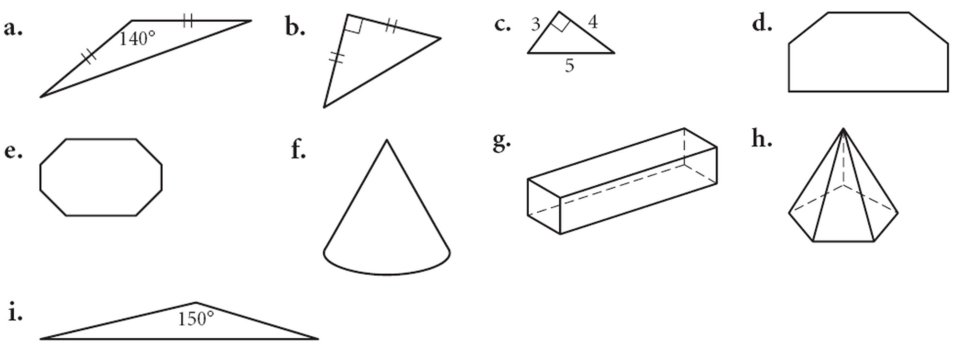
1. The three basic building blocks (undefined terms) of geometry ~~are lines, rays, and~~ segments.
   False points, lines, planes
2. "The ray from point R through points P and Q" is named as $\overrightarrow{RP}$ or $\overrightarrow{RQ}$.
   True
3. "The line segment from point P to point Q" is named as $\overline{PQ}$.
   True
4. The length of line segment PQ is ~~named as~~ $\overline{PQ}$.
   False $m\overline{PQ}$ or PQ
5. The vertex of angle ABC is ~~point~~ A.
   False B
6. An obtuse angle is an angle whose measure is greater than 90°.
   True
7. An isosceles triangle is a triangle ~~with no two sides the same length~~.
   False at least two sides congruent
8. A diagonal is a line segment connecting ~~any~~ two vertices of a polygon.
   False two nonconsecutive
9. If $\overleftrightarrow{AB}$ intersects $\overleftrightarrow{CD}$ at point P, then $\angle APC$ and $\angle APD$ ~~are a pair of vertical~~ angles. (Point P is between points A and B, and also between points C and D.)
   False linear pair of angles



10. If the sum of the measures of two angles is 90°, then the two angles are complement
    True
11. If two lines do not intersect, then they are parallel.
    False in the same plane
12. A ~~chord~~ is a line that intersects a circle in exactly one point.
    False tangent
13. A trapezoid is a quadrilateral that has exactly one pair ~~of equal length~~ sides.
    False parallel
14. If the measure of $\angle D$ is 133°, then the reflex measure of $\angle D$ is 227°.
    True
15. A polygon with eight sides is ~~called a hexagon~~.
    False octagon

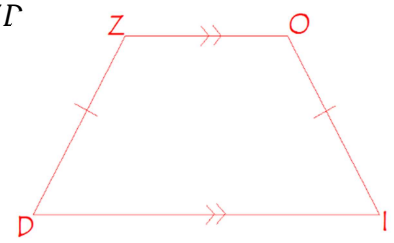
(2 points each) Match each term with its figure.

16. Obtuse scalene triangle
    I
17. Isosceles right triangle
    B
18. Hexagon
    D
19. Prism
    G
20. Pyramid
    H

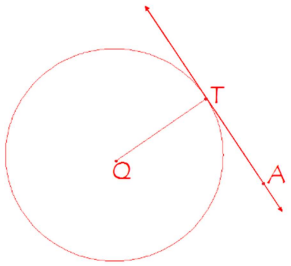


(5 points each) Sketch, mark, and label each figure.

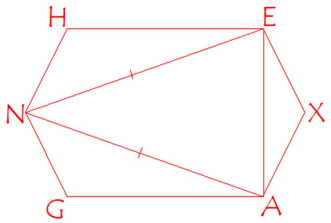
21. Trapezoid ZOID with $\overline{ZO} \parallel \overline{ID}$ and $IO = ZD$



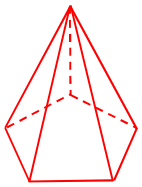
22. Circle Q with radius $\overline{QT}$ and tangent $\overleftrightarrow{AT}$



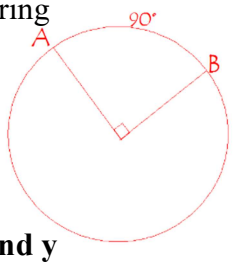
23. A hexagon HEXAGN with vertices N, E, and A joined to form isosceles triangle NEA such that $\overline{NE} \cong \overline{NA}$



24. A pyramid with a pentagonal base

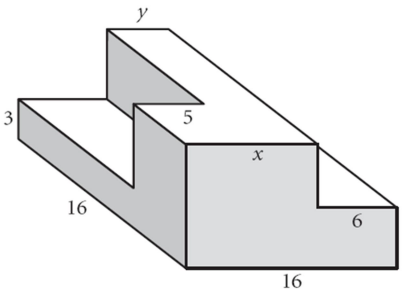


25. A circle with an arc AB measuring 90°



(5 points each) Every angle on each block is a right angle. Find the lengths x and y in each figure.

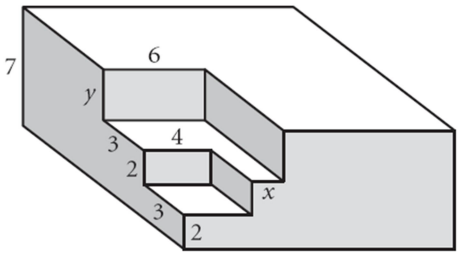
26.



$x = 10$

$y = 5$

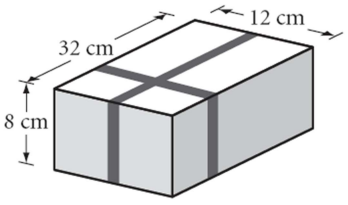
27.



$x = 2$ $y = 3$

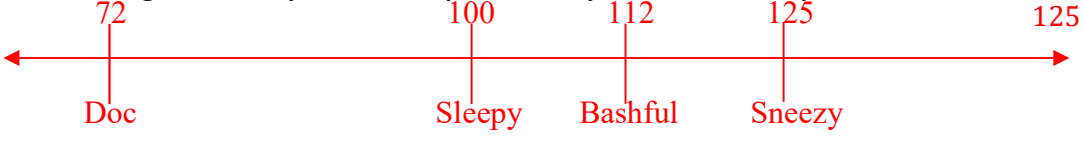
(5 points each) Complete.

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



$2(12) = 24$
$2(32) = 64$
$4(8) = 32$
$120\ cm$

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



$125 - 112 = 13$ feet