

Direction: Select the letter of the correct answer for each question below.

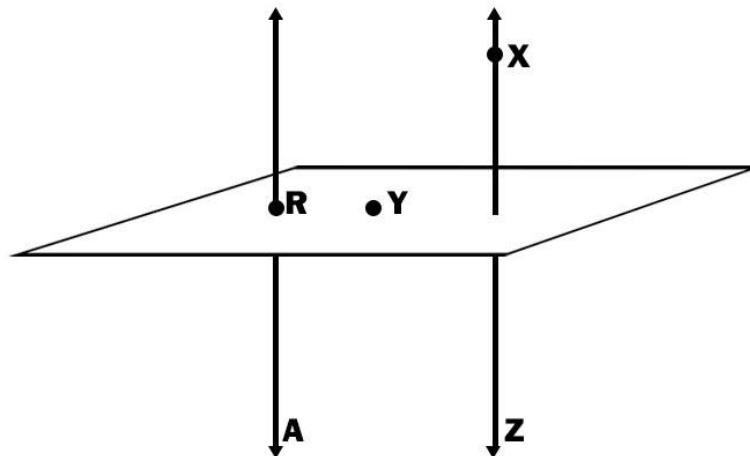
1) Which of the following is not included in Euclid's five postulates that are in his book "Elements".

- (a) All right angles are congruent
- (b) If a point is not on a given line, then you can create only one straight line that passes through that point which is parallel to the given line
- (c) Two points can be connected to form a straight line
- (d) When a bisector intersects a segment, then the intersection is the midpoint of the segment

2) Suppose that point X is in between the collinear points W and Y. Determine the value of x if $WY = 10$, $WX = 3x + 5$ and $XY = 2$

- (a) $x = 4$
- (b) $x = 3$
- (c) $x = 2$
- (d) $x = 1$

3) Based on the figure below, which is/are true?



- I. Point A is coplanar with points Y and Z
- II. Point A is collinear with points R and Y
- III. The line containing point A is parallel with the line containing point X
- IV. Point R and Y lies in the same line

- (a) I only
- (b) III only
- (c) I and IV only
- (d) III and IV only

4) Which of the following is always a true statement?

- I. The intersection of two lines is a point
- II. All plane figures are polygon
- III. If two lines extends infinitely and didn't meet, then they are parallel lines
- IV. The intersection of a line and a line segment is the midpoint of that line segment

- (a) I and II only
- (b) I and III only
- (c) I and IV only
- (d) I, II, and III only

5). How many diagonals does a dodecagon have?

- (a) 87
- (b) 64
- (c) 54
- (d) 32