

<b>Last Name:</b>	
<b>First Name:</b>	
<b>Class:</b>	
<b>Grade:</b>	<b>Converted to Final Grade:</b>

**Intermediate Engineering Graphics**  
**Instructor: Edward N. Locke**

## **Quiz 2: Geometric Shapes and Construction, Coordinate System and Types of Drawings**

**(1). The four principle categories of engineering drawings according to their target fields of usage are:**

1. mechanical, electronic, architectural, and production;
2. three- views, pictorial, perspective and isometrics;
3. mechanical, electrical, architectural, and civil;
4. two-views, three-views, one-point perspective and two-point perspective.

**(2). Circle the correct statement about “the Right-hand Rule”:**

1. The thumb pointing towards right direction represents the X-axis, the index finger pointing upwards represents the Y-axis, and middle finger pointing at yourself represents the Z-axis;
2. The thumb pointing towards right direction represents the Y-axis, the index finger pointing upwards represents the X-axis, and middle finger pointing at yourself represents the Z-axis.

**(3). Circle all correct statements about isometric drawings:**

1. Isometric drawings are the most realistic and picture-like drawings;
2. Isometric drawings are one of the easiest to make among all pictorial drawings;
3. In isometric drawings, the three axes are 120° apart;
4. In isometric drawings, one side of the object appears closest. The top and one side slant away. Isometric drawings are based on one perpendicular set of lines and one receding line, at any angle but with 30° or 45° as the most common.

**(4). Circle all correct statement about three-view drawings:**

1. Three-view drawings are orthographic drawings;
2. Three-view drawings show the objects in a three-dimensional, realistic and pictorial way;
3. Three-view drawing are used for most objects, but sometimes auxiliary views showing the interior details of an object or sectional views showing the true shape of a slanted surface are needed to completely describe the object.
4. Three-view drawing are used for most objects, but sometimes auxiliary views showing the true shape of slanted surface or sectional views showing the inside details of an object are needed to completely describe the object.

**(5). Circle all correct statement about perspective drawings:**

1. Perspective drawings are the most realistic and natural type of pictorial drawing and show the real dimensions of the object, and therefore, can be used as working drawings;
2. All measurement in perspective drawings are “estimated”, and therefore, perspective drawings can not be used as working drawings;
3. For showing small-sized consumer electronic products, perspective drawings are usually used;
4. Perspective drawings are primarily used for architectural or “large” equipment.

**(6). Circle all correct statements on angles A ( $150^\circ$ ), B ( $90.5^\circ$ ), C ( $25^\circ$ ), D ( $75^\circ$ ) and E ( $89.9^\circ$ ):**

1. Angle A is an obtuse angle; Angle C and D are acute angles;
2. Angle B is a right angle;
3. Angle B is an obtuse angle;
4. Angle E is an acute angle.

**(7). A three-sided shape with two equal sides and three acute angles is:**

1. An equilateral triangle;
2. A right triangle;
3. An isosceles triangle;
4. None of the above.

**(8). A quadrilateral with four equal sides and two pairs of equal opposite angles is:**

1. A rectangle;
2. A trapezoid;
3. A rectangle or a rhombus;
4. A rhombus.

**(9). Using a compass, a ruler, and a pencil,**

1. Draw an angle and an arc, and bisect them:

angle

arc

2. Draw a line and divide it into five equal parts:

line

3. Draw a line as a base and construct an equilateral triangle:

line