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

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

# **Quiz 2: Drafting Basics (Systems of Measurement, Basic Geometric Construction, Drawing Scale and Paper Sizes)**

## (1). Circle all correct statements about the two systems of units used in engineering drawing:

- 1. In the Metric system, 1 km = 1,024 m, 1 m = 12 decimeter, 1 decimeter = 12cm;
- 2. In the US Customary or British Imperial system, 1.5 yard = 4.5 feet, 2 foot = 24 inches;
- 3. In the Metric system, 5.6 km = 5,600 m, 10 m = 100 decimeter, 1 m = 1,000 mm.
- 4. One kilometer is longer than one mile, and one yard is longer than one meter.

### (2). Please tell me the customary sizes of the following paper sizes:

- 1. A5:
- 2. A6:

### (3). Do the following conversion and calculation:

- 1. 6.33 km = m
- 2. 30 in = ft
- 3.  $3\frac{1}{2}$  ft = in
- 4. 3.5 m = mm
- 5. 0.15 m = mm
- 6. 2 in = mm
- 7. 5 yards = inches
- 8. 5 mm = in

### (4). Circle all correct statements on angles A (145°), B (90.1°), C (15°), D (55°) and E (89.9°):

- 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.

### (5). 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.

### (6). 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.

### (7). 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: