| Last Name: |  |
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| Class: |  |
| Grade: | Converted to Final Grade: |

## 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, $1 \mathrm{~km}=1,024 \mathrm{~m}, 1 \mathrm{~m}=12$ decimeter, 1 decimeter $=12 \mathrm{~cm}$;
2. In the US Customary or British Imperial system, 1.5 yard $=4.5$ feet, 2 foot $=24$ inches;
3. In the Metric system, $5.6 \mathrm{~km}=5,600 \mathrm{~m}, 10 \mathrm{~m}=100$ decimeter, $1 \mathrm{~m}=1,000 \mathrm{~mm}$.
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:
5. A5:
6. A6:
(3). Do the following conversion and calculation:
7. $\quad 6.33 \mathrm{~km}=\quad \mathrm{m}$
8. $\quad 30$ in $=\mathrm{ft}$
9. $\quad 31 / 2 \mathrm{ft}=$ in
10. $3.5 \mathrm{~m}=\mathrm{mm}$
11. $0.15 \mathrm{~m}=\quad \mathrm{mm}$
12. 2 in $=\mathrm{mm}$
13. 5 yards $=$ inches
14. $5 \mathrm{~mm}=$ in
(4). Circle all correct statements on angles A (145 $)$, B(90.1 $), C\left(15^{\circ}\right), D\left(55^{\circ}\right)$ and $\mathbf{E}$ (89.9 ${ }^{\circ}$ ):
15. Angle A is an obtuse angle; Angle C and D are acute angles;
16. Angle $B$ is a right angle;
17. Angle B is an obtuse angle;
18. Angle E is an acute angle.
(5). A three-sided shape with two equal sides and three acute angles is:
19. An equilateral triangle;
20. A right triangle;
21. An isosceles triangle;
22. None of the above.
(6). A quadrilateral with four equal sides and two pairs of equal opposite angles is:
23. A rectangle;
24. A trapezoid;
25. A rectangle or a rhombus;
26. A rhombus.
(7). Using a compass, a ruler, and a pencil,
27. Draw an angle and an arc, and bisect them:
angle arc
28. Draw a line and divide it into five equal parts:
line
29. Draw a line as a base and construct an equilateral triangle:
line
