Math 20-2 Formula Sheet

Geometry:

$$Sum\ of\ Angles = 180n - 360$$

$$Each\ Angle = \frac{180n - 360}{n}$$

Statistics:

$$z = \frac{x - \mu}{\sigma}$$

Relations and Functions:

$$General\ \ Form:\ y = ax^2 + bx + c$$

$$Factored\ Form:\ y = a(x - r)(x - s)$$

$$Vertex\ Form:\ y = a(x - h)^2 + k$$

$$Quadratic\ Formula:$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Measurement:

$$slope = \frac{rise}{run} \qquad m = \frac{y_1 - y_2}{x_1 - x_2}$$

$$scale\ factor\ \ k = \frac{diagram\ measure}{actual\ measure}$$

$$k^2 = \frac{area_1}{area_2}$$

$$k^3 = \frac{volume_1}{volume_2}$$

Trigonometry:

$$a^2 + b^2 = c^2$$

$$sin\theta = \frac{opposite}{hypotenuse}$$

$$cos\theta = \frac{adjacent}{hypotenuse}$$

$$tan\theta = \frac{opposite}{adjacent}$$

$$\frac{a}{sinA} = \frac{b}{sinB} = \frac{c}{sinC}$$

$$a^2 = b^2 + c^2 - 2bcCosA$$

$$cosA = \frac{b^2 + c^2 - a^2}{2bc}$$