

Analytic Geometry
Weekly EOC Review Homework

Name: Hirsch

	MONDAY - Jan 11	TUESDAY - Jan 12	WEDNESDAY - Jan 13	THURSDAY - Jan 14						
UNIT 1	<p>Solve for y:</p> $3y + 53 = 7y - 55$ $-3y \quad -3y$ <hr/> $53 = 4y - 55$ $+55 \quad +55$ <hr/> $108 = 4y$ $\frac{108}{4} = \frac{4y}{4}$ $y = 27$	<p>Name the corresponding sides and corresponding angles of the following:</p> <p>Sides: DE & GH, DF & GI, EF & HI Angles: $\angle D$ & $\angle G$, $\angle E$ & $\angle H$, $\angle F$ & $\angle I$</p> <p>$\triangle ABC \cong \triangle DEF$ by AAS Cong. Theorem</p>	<p>How can these triangles be proven to be congruent?</p> <p>$\triangle ABC \cong \triangle DEF$ by AAS Cong. Theorem</p>	<p>How tall is the tree?</p> $\frac{5}{8} = \frac{x}{28}$ $8x = 140$ $\frac{8x}{8} = \frac{140}{8}$ $x = 17.5 \text{ ft}$						
UNIT 2	<p>Solve for x.</p> $\sin 51 = \frac{14}{x}$ $x = \frac{14}{\sin 51}$ $x = 18.015$	<p>Find the building's height</p> <p>Note: Figure not drawn to scale.</p> $\tan 32 = \frac{x}{75}$ $x = 75 \cdot \tan 32$ $x = 46.865 \text{ ft}$	<p>Find the value of x.</p> $\tan \theta = \frac{7}{24}$ $\theta = \tan^{-1}\left(\frac{7}{24}\right) = 16.260^\circ$	<p>If $\cos(a) = \sin(55^\circ)$, what is the value of a? 35°</p> <p>If $\sin(a) = \cos(34^\circ)$, what is the value of a? 56°</p> <p>What is the relationship between $\sin \theta$ and $\cos \theta$? They are complements</p>						
UNIT 3	<p>Find the missing angle:</p> $\frac{80}{2} = 40^\circ$	<p>Find the Sector's Area:</p> $\frac{60}{360} \cdot \pi (8)^2$ $= \frac{32\pi}{3} \text{ or } 33.510 \text{ cm}^2$	<p>Find the Cone's Volume:</p> $V = \frac{1}{3} \pi r^2 h$ $= \frac{1}{3} \pi (4)^2 (3)$ $= 16\pi \text{ or } 50.265 \text{ cm}^3$	<p>Find the length of arc CD.</p> $\frac{145}{360} \cdot 2\pi (12)$ $= \frac{29\pi}{3} \text{ or } 30.369 \text{ yds}$						
UNIT 4	<p>Find the product of:</p> $(5x - 3)(-4x + 2)$ <table border="1"> <tr> <td>$5x$</td> <td>-3</td> </tr> <tr> <td>$-4x$</td> <td>$12x$</td> </tr> <tr> <td>2</td> <td>-6</td> </tr> </table> $-20x^2 + 22x - 6$	$5x$	-3	$-4x$	$12x$	2	-6	<p>Find the perimeter:</p> <p>Add all sides</p> $12x + 10$ <p>units</p>	<p>Simplify the following Radicals (without using a calculator... I must see your work).</p> $1. \sqrt{8} = 2\sqrt{2}$ $2. \sqrt{32} = 4\sqrt{2}$	<p>Find the Area:</p> $(4x+5)(4x+5)$ $16x^2 + 20x + 25$
$5x$	-3									
$-4x$	$12x$									
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