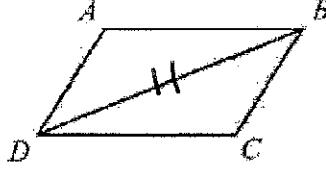
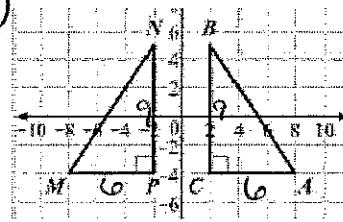
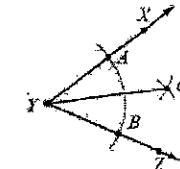
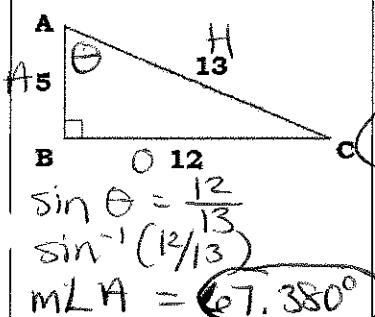
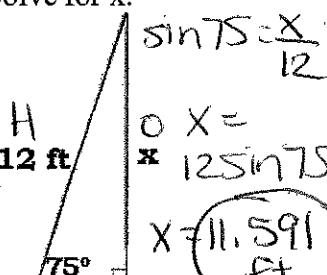
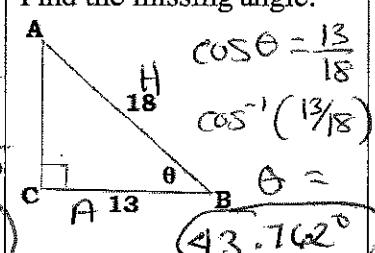
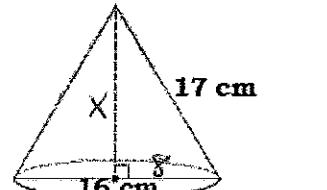
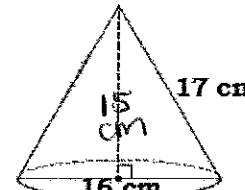


Analytic Geometry
Weekly EOC Review Homework

Name: Hirsch

| | MONDAY – Feb 1 | TUESDAY – Feb 2 | WEDNESDAY – Feb 3 | THURSDAY – Feb 4 |
|-------------------|---|---|--|---|
| UNIT 1 | <p>$\overline{BD} \cong \overline{BD}$. Which property proves this?</p> <p><u>Reflexive Property</u></p>  | <p>Are the following triangles congruent. If so, which congruency theorem proves it?</p> <p></p> <p>YES, SAS Cong. Th.</p> | <p>Triangle ABC has the following points A (3, 6); B (12, 15); and C (9, 0). If it dilated with a scale factor of 1/3, what are the new points?</p> <p>A': <u>(1, 2)</u> B': <u>(4, 5)</u> C': <u>(3, 0)</u></p> | <p>What is the first step in constructing the angle bisector shown?</p>  |
| UNIT 2 and UNIT 5 | <p>Find the measure of $\angle A$.</p>  <p>$\sin \theta = \frac{12}{13}$ $\sin^{-1}(\frac{12}{13})$ $m\angle A = 27.380^\circ$</p> | <p>Factor the expression: $16a^4 - 81$.</p> <p>$(4a^2 + 9)(4a^2 - 9)$ $(4a^2 + 9)(2a + 3)(2a - 3)$</p> | <p>Solve for x.</p>  <p>$\sin 75^\circ = \frac{x}{13}$ $x = 12 \sin 75^\circ$ $x = 11.591 \text{ ft}$</p> | <p>Find the missing angle:</p>  <p>$\cos \theta = \frac{12}{13}$ $\cos^{-1}(\frac{12}{13})$ $\theta = 43.762^\circ$</p> |
| UNIT 3 | <p>Find the <u>height</u> of the cone:</p>  <p>$8^2 + x^2 = 17^2$ $64 + x^2 = 289$ -64 $x^2 = 225$ $x = 15 \text{ cm}$</p> | <p>Find the <u>volume</u> of the cone:</p>  <p>$V = \frac{1}{3} \pi r^2 h$ $= \frac{1}{3} \pi (8)^2 (15)$ $= 320\pi$ $= 1605.310 \text{ cm}^3$</p> | <p>A cylinder and a cone both have a radius of 10 cm and a height of 9 cm. Show that the volume of the cylinder is 3 times the cone's volume.</p> <p>Cylinder: $V = \pi r^2 h$ $V = \pi (10)^2 (9)$ $= 900\pi = 2827.433 \text{ cm}^3$</p> <p>Cone: $V = \frac{1}{3} \pi r^2 h$ $V = \frac{1}{3} \pi (10)^2 (9)$ $= 300\pi = 942.478 \text{ cm}^3$</p> | <p>The volume of a sphere is $400\pi \text{ in}^3$. What is the radius of the sphere?</p> <p>$V = \frac{4}{3} \pi r^3$ $400\pi = \frac{4}{3} \pi r^3$ $\frac{4}{3}\pi$ $300 = r^3$ $\sqrt[3]{300} = r$ $r = 6.1694 \text{ in}$</p> |
| UNIT 4 | <p>Simplify:</p> <p>$(x+4)(x^2 - 5x + 3)$</p> <p>$x^3 - 5x^2 + 3x$</p> <p>$x \begin{array}{ c c c } \hline x^3 & -5x^2 & 3x \\ \hline 4x^2 & -20x & 12 \\ \hline \end{array}$</p> <p>$x^3 - x^2 - 17x + 12$</p> | <p>Simplify:</p> <p>$(3x^2 + 7x - 2) - (3x + 2)$</p> <p>$3x^2 + 7x - 2 - 3x - 2$</p> <p>$3x^2 + 2x - 4$</p> | <p>Find the perimeter of the following rectangle:</p> <p>$4x+1$ $2x-3$</p> <p>$4x+1$</p> <p>Add up sides</p> <p>$12x - 4$ units</p> | <p>Find the area of the following rectangle:</p> <p>$2x-3$</p> <p>$4x+1$</p> <p>$(4x+1)(2x-3)$</p> <p>$8x^2 - 12x + 2x - 3$</p> <p>$8x^2 - 10x - 3$ units²</p> |

Due on Friday