

	MONDAY - Jan 25	TUESDAY - Jan 26	WEDNESDAY - Jan 27	THURSDAY - Jan 28
UNIT 1	<p>Given the smaller triangle is dilated to get the larger triangle, what is the scale factor?</p> <p>$K=2$</p>	<p>Figure A'B'C'D' is a dilation of ABCD. Find the center of dilation.</p> <p>$(4, 2)$</p>	<p>ΔABC is dilated by a factor of $\frac{2}{3}$ to form ΔXYZ. Given $m\angle A = 50^\circ$ and $m\angle B = 100^\circ$, what is $m\angle Z$?</p> <p>$m\angle Z = 30^\circ$</p>	<p>$\angle 1$ and $\angle 3$ are <u>vertical</u> angles and their measures are <u>congruent</u>.</p> <p>$\angle 2$ and $\angle 3$ are <u>linear</u> pairs and their measures are <u>supplementary</u>.</p>
UNIT 2 and UNIT 5	<p>What ratio represents $\sin F$?</p> <p>$\frac{O}{H} = \frac{3}{5}$</p>	<p>Factor the following:</p> <p>1. $a^2 - 64$ diff of sq. $(a+8)(a-8)$</p> <p>2. $\frac{6x-18}{6}$ GCF $6(x-3)$</p>	<p>Note: Figure not to scale.</p> <p>Solve for x. $\frac{5900}{\sin 3} = x$ $x = \frac{5900}{\sin 3}$ $x = 112,733.203$</p>	<p>Find the missing angle:</p> <p>$\sin \theta = \frac{11}{15}$ $\theta = \sin^{-1}(\frac{11}{15})$ $\theta = 47.167^\circ$</p>
UNIT 3	<p>A sandcastle mold is in the shape of a cylinder with a diameter of 6 in. and a height of 8 in. How much sand (to the nearest cubic inch) will fit in the mold?</p> <p>$V = \pi r^2 h$ $= \pi (3)^2 (8)$ $= 72\pi$ $= 226.195 \text{ in}^3$</p>	<p>In the circle shown, BC is a diameter and the measure of Arc AB is 120°. What is the measure of $\angle ABC$?</p> <p>$m\angle ABC = 30^\circ$</p>	<p>Find the length of arc BD.</p> <p>$\frac{100}{360} \cdot 2\pi(7)$ $= \frac{35\pi}{9} = 12.217 \text{ ft}$</p>	<p>The area of a circle is $16\pi \text{ ft}^2$. What is the circumference of the same circle?</p> <p>$\frac{\pi r^2}{\pi} = \frac{16\pi}{\pi}$ $r^2 = 16$ $r = \sqrt{16} = 4$ $C = 2\pi r = 2\pi(4)$ $= 8\pi = 25.133 \text{ ft}$</p>
UNIT 4	<p>Which expression is a rational number?</p> <p>A. $\sqrt{10} + 16$ B. $2(\sqrt{5} + \sqrt{7})$ C. $\sqrt{9} + \sqrt{4} = 5$ D. $\sqrt{3} + 0$</p>	<p>Simplify:</p> <p>$(7x + 6) + (6x - 4)$</p> <p>$13x + 2$</p>	<p>Let "a" be a nonzero rational # and "b" be an irrational #. Which of the following must be a rational number? If $a=2$</p> <p>A. $b+0$ $\pi+0$ $b=\pi$ B. $a+a$ $2+2=4$ C. $a+b$ $2+\pi$ D. $b+b$ $\pi+\pi$</p>	<p>Find the volume of a cube with the sides $(x-5)$, $(x+3)$, and $(2x+1)$.</p> <p>$(x-5)(x+3)$ $x^2 + 3x - 5x - 15$ $x^2 - 2x - 15$ $(2x+1)(x^2 - 2x - 15)$ $2x^3 - 4x^2 - 30x + x^2 - 2x - 15$ $2x^3 - 3x^2 - 32x - 15$</p>