Please complete 2 problems from each section on your review (It will count as a quiz grade). Your review is due the day of the test, (A day January 27th, B day January 28th). You are responsible for this content whether or not you were in this class at the time. See <u>www.CalcChat.com</u> (Chapter 4: Section "Review") for worked-out solutions to odd numbered exercises. You must have 15 problems completed to receive full credit.

Converting to Decimal Degree Form In Exercises 11–14, use the angle-conversion capabilities of a graphing utility to convert the angle measure to decimal degree form. Round your answer to three decimal places.

11.	135° 16′ 45″	12.	$-234^{\circ}40''$
13.	6° 34′ 19″	14.	242° 24′ 9″

Converting to D°M'S" Form In Exercises 15–18, use the angle-conversion capabilities of a graphing utility to convert the angle measure to D°M'S" form.

15.	135.29°	16.	25.8°
17.	-85.36°	18.	-327.93°

Converting from Radians to Degrees In Exercises 23–26, convert the angle measure from radians to degrees. Round your answer to three decimal places.

23. $\frac{5\pi}{7}$	24. $-\frac{3\pi}{5}$
25. -3.5	26. 1.55

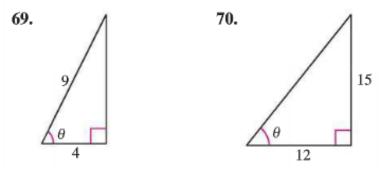
Complementary and Supplementary Angles In Exercises 31–34, find (if possible) the complement and supplement of the angle.

31.	5°	32.	84°	
33.	157°	34.	108°	

Complete the ALL the following problems:

- **36.** Geometry Find the radian measure of the central angle of a circle with a radius of 60 inches that intercepts an arc of length 245 inches.
- **37. Geometry** Find the length of the arc on a circle with a radius of 20 meters intercepted by a central angle of 138°.
- **39. Finding Linear Speed** The radius of a compact disc is 6 centimeters. Find the linear speed of a point on the circumference of the disc if it is rotating at a speed of 500 revolutions per minute.
- **40. Finding Angular Speed** A car is moving at a rate of 28 miles per hour, and the diameter of its wheels is about $2\frac{1}{3}$ feet.
 - (a) Find the number of revolutions per minute the wheels are rotating.
 - (b) Find the angular speed of the wheels in radians per minute.

Evaluating Trigonometric Functions In Exercises 69–76, find the exact values of the six trigonometric functions of the angle θ .



- **84.** Architecture An escalator 152 feet in length rises to a platform and makes a 30° angle with the ground.
 - (a) Draw a right triangle that gives a visual representation of the problem. Show the known quantities and use a variable to indicate the height of the platform above the ground.
 - (b) Use a trigonometric function to write an equation involving the unknown quantity.
 - (c) Find the height of the platform above the ground.