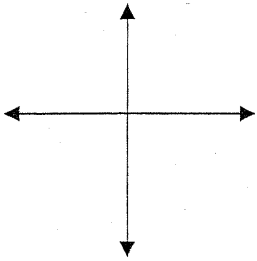


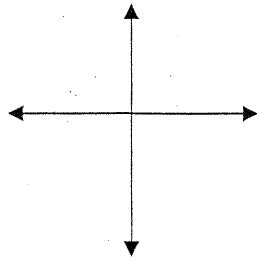
**REVIEW for QUIZ**

1. Sketch the following angles in standard position.  
Label the angle and show the correct direction (clockwise or counterclockwise).

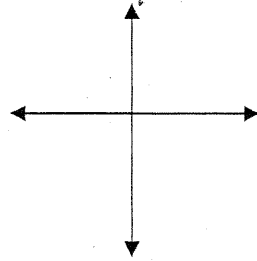
a.  $150^\circ$



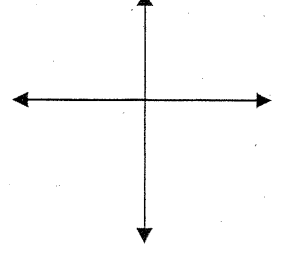
b.  $-80^\circ$



c.  $5\pi/2$



d.  $-7\pi/6$



2. Give 2 co-terminal angles (1 positive, 1 negative) with the angles above.

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Tell which Quadrant the following angles are located in.

a.  $-100^\circ$

\_\_\_\_\_

b.  $7\pi/3$

\_\_\_\_\_

c.  $15^\circ$

\_\_\_\_\_

d.  $-9\pi/7$

\_\_\_\_\_

4. Convert the following revolutions to degree measure:

a.  $2/3$  a revolution clockwise = \_\_\_\_\_

b. 2 revolutions counterclockwise = \_\_\_\_\_

5. Convert the following revolutions to radian measure:

a.  $.75$  revolution clockwise = \_\_\_\_\_

b. 7 revolutions counterclockwise = \_\_\_\_\_

6. Convert the following radian measures to degree measures:

a.  $\frac{\pi}{4} =$  \_\_\_\_\_

b.  $\frac{-3\pi}{2} =$  \_\_\_\_\_

c.  $2\pi =$  \_\_\_\_\_

7. Convert the following degree measures to radian measures:

a.  $90^\circ =$  \_\_\_\_\_

b.  $-135^\circ =$  \_\_\_\_\_

c.  $45^\circ =$  \_\_\_\_\_

Use the following formulas to solve the radian-application problems.

**Linear speed**       $V = \frac{\text{arc length } s}{\text{Time } t}$

**Angular speed**     $\omega = \frac{\text{central angle } \theta}{\text{time } t}$

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8. A merry-go-round with a 30 foot diameter makes 3 revolutions per minute.

a. Find the angular speed of the carousel in radians per minute.

b. Find the linear speed in feet per min. of the outermost "horse" on the carousel.