Review- Vectors

Find the magnitude (simplified radical form) and direction angle (in degrees) for each vector. Draw the vector first

1. $\langle 4, -10 \rangle$
2. $\langle -5, 1 \rangle$
3. $-3i - 5j$

4. $3i - 4j$
5. $\langle -11, -7 \rangle$
6. $\langle 6, 12 \rangle$

7. If $Q = (3,4)$ and $R = (-2,5)$ Find the component form and magnitude of vector $\overrightarrow{QR}$

DO ALL PROBLEMS NEATLY ON LINED PAPER.

Quick Review

In Exercises 1 and 2, determine the quadrants containing the terminal side of the angles.

1. **(a)** $5\pi/6$ **(b)** $-3\pi/4$

2. **(a)** $-300°$ **(b)** $210°$

In Exercises 3–6, find a positive and a negative angle coterminal with the given angle.

3. $-\pi/4$ **4.** $\pi/3$

5. $160°$ **6.** $-120°$

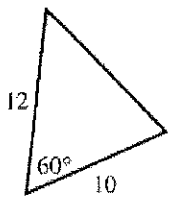
In Exercises 7 and 8, write a standard form equation for the circle.

7. Center $(3, 0)$ and radius 2

8. Center $(0, -4)$ and radius 3

In Exercises 9 and 10, use the Law of Cosines to find the measure of the third side of the given triangle.

9.



10.