Trigonometric Ratios with Obtuse Angles

For each given point that lies on the terminal arm of an angle:

a. Sketch a diagram for the angle in standard position.
b. Determine the distance from the origin to the point.
c. Determine the primary trigonometric ratios to four decimal places.
d. Determine the measure of the angle.

1. Point P (3, 4)

2. Point Q (2, 7)

3. Point R (-4, 3)

4. Point S(-6, 5)

The tangent of an obtuse angle, θ, in standard position is $-\frac{12}{5}$.

    a. Sketch a diagram of angle θ.
    b. Identify the coordinates of a point that lies on the terminal arm of angle θ.
    c. Determine sin θ and cos θ.
    d. Determine the measure of angle θ.