Name _____ Date _____

Using and Understanding the Unit Circle - Matching Worksheet

Write the letter of the answer that matches the problem.

_____ 1. Let $\sin\theta = -\frac{5}{7}$
Find the value of a given trigonometric ratio using unit circles:
$\cos\theta =$, $\tan\theta =$

_____ 2. Let $\sin\theta = \frac{13}{39}$
Find the value of a given trigonometric ratio using unit circles:
$\sec\theta =$, $\csc\theta =$

_____ 3. Let $\cos\theta = -\frac{14}{28}$
Find the value of a given trigonometric ratio using unit circles:
$\sin\theta =$, $\tan\theta =$

_____ 4. Let $\cos\theta = -\frac{7}{17}$
Find the value of a given trigonometric ratio using unit circles:
$\sec\theta =$, $\csc\theta =$

_____ 5. Let $\sin\theta = -\frac{16}{21}$
Find the value of a given trigonometric ratio using unit circles:
$\sec\theta =$, $\csc\theta =$

_____ 6. Let $\cos\theta = -\frac{21}{31}$
Find the value of a given trigonometric ratio using unit circles:
$\tan\theta =$, $\sec\theta =$

a. $\sin\theta = -\frac{\sqrt{3}}{2}$, $\tan\theta = \sqrt{3}$

b. $\sec\theta = \frac{21}{185}$, $\csc\theta = -\frac{21}{16}$

c. $\cos\theta = \frac{24}{7}$, $\tan\theta = -\frac{5}{24}$

d. $\sec\theta = \frac{3}{104}$, $\csc\theta = 3$

e. $\tan\theta = \frac{2\sqrt{130}}{21}$, $\sec\theta = -\frac{31}{21}$

f. $\sec\theta = -\frac{17}{7}$, $\csc\theta = -\frac{17}{4\sqrt{15}}$