6. [8 points] For each of the statements below, circle TRUE or FALSE and *briefly explain* your reasoning. *Credit will only be given for a reasonable explanation—circling alone is no credit.*

a. [2 points] A degree-5 polynomial will always have 5 zeros.

TRUE   FALSE   NOT ENOUGH INFORMATION

Explanation:

b. [2 points] Because a right triangle cannot contain any angles greater than 90°, we cannot find the sine or cosine of any angles greater than 90°.

TRUE   FALSE   NOT ENOUGH INFORMATION

Explanation:

c. [2 points] If $f(x)$ is an even function with domain $[-4, 4]$, then $f(x)$ is *definitely not* invertible.

TRUE   FALSE   NOT ENOUGH INFORMATION

Explanation:

d. [2 points] The function $w(r) = 0.4e^{0.15r}$ is an exponentially decreasing function of r.

TRUE   FALSE   NOT ENOUGH INFORMATION

Explanation: