

2.3.2 Why didn't my calculator tell me?

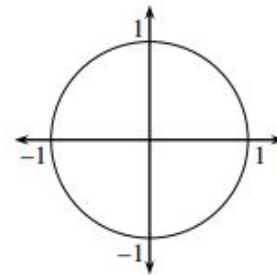
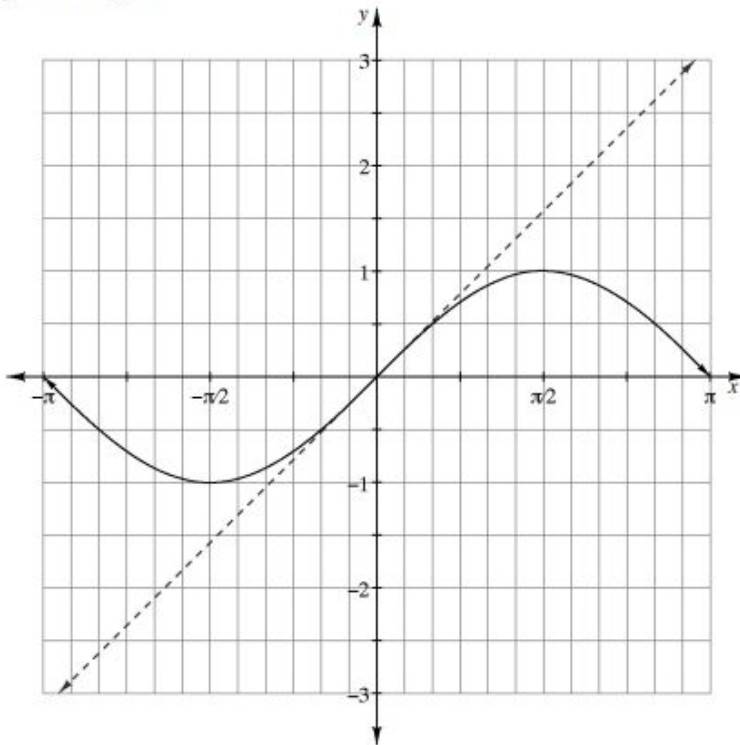
Inverse Sine and Cosine



#135

(a) through (e)

$$y = \sin^{-1}(x)$$



f. State the domain and range of $f(x) = \sin(x)$ that you chose in part (e). What are the corresponding domain and range of $f^{-1}(x) = \sin^{-1}(x)$?

g. Describe the portion of $f(x) = \sin(x)$ that you highlighted in part (e).

h. Review the graph of $f(x) = \sin(x)$. Is there a different portion of the graph that you could have chosen in part (e)? If so, state the domain of this portion of the graph and describe it.

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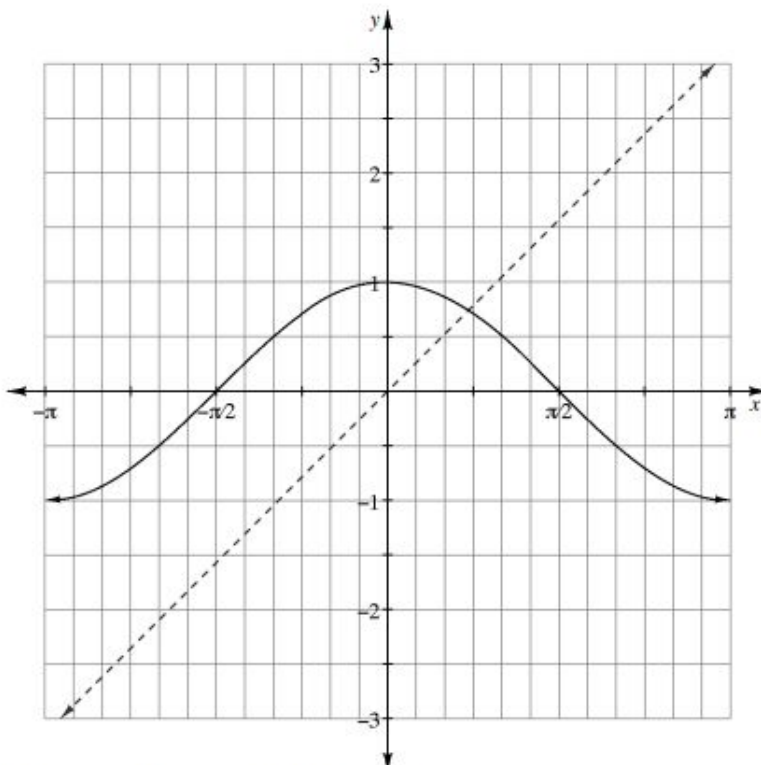
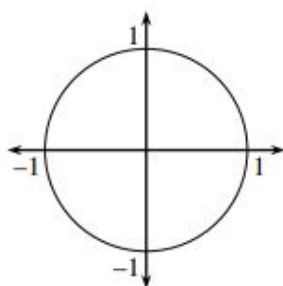
Inverse Sine and Cosine



#136

a/b.

$y = \cos^{-1}(x)$



c. What are the domain and range of $f(x) = \cos(x)$ that you chose in part (b)? What are the corresponding domain and range of $f^{-1}(x) = \cos^{-1}(x)$?

d. Describe the portion of $f(x) = \cos(x)$ that you chose in part (b).

e. Review the graph of $f(x) = \cos(x)$. Is there a different portion of the graph that you could have chosen in part (b)? If so, state the domain of this portion of the graph and describe it.