Check your understanding

- 23. Can different level sets of the same function ever cross each other?
 - (a) Yes.
 - (b) No.
- 24. If contour lines are close together, what does this mean about the function?
 - (a) The function changes rapidly as one moves across the contour lines.
 - (b) The function changes slowly as one moves across the contour lines.
 - (c) Neither.

Answers: (b), (a).

Explanation: Two different level sets cannot cross, because a function cannot have two different values at the same point.