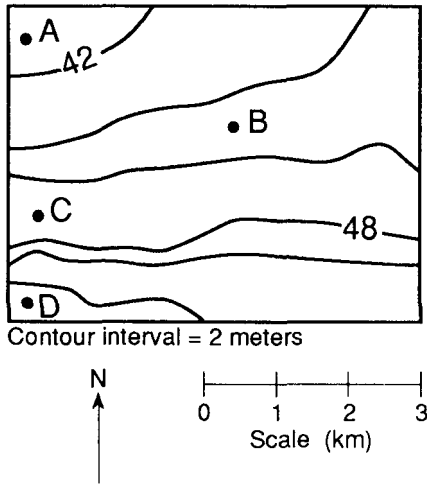


1. A stream has a source at an elevation of 1,000. meters. It ends in a lake that has an elevation of 300. meters. If the lake is 200. kilometers away from the source, what is the average gradient of the stream?

- (1) 1.5 m/km (3) 10. m/km
 (2) 3.5 m/km (4) 15 m/km

2. Base your answer to the following question on the topographic map below. *A*, *B*, *C*, and *D* are locations on the map.



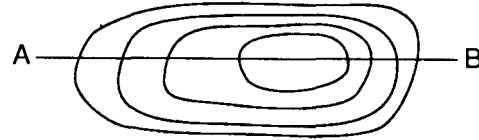
Between which two locations does the steepest gradient occur?

- (1) *A* and *B* (3) *C* and *D*
 (2) *B* and *C* (4) *A* and *C*

3. Point *A* and point *B* are locations 0.24 mile apart on a ski slope in northern New York. Point *A* has an elevation of 1,560 feet and point *B* has an elevation of 1,800 feet. What is the gradient between these points?

- (1) 60 ft/mi (3) 500 ft/mi
 (2) 240 ft/mi (4) 1,000 ft/mi

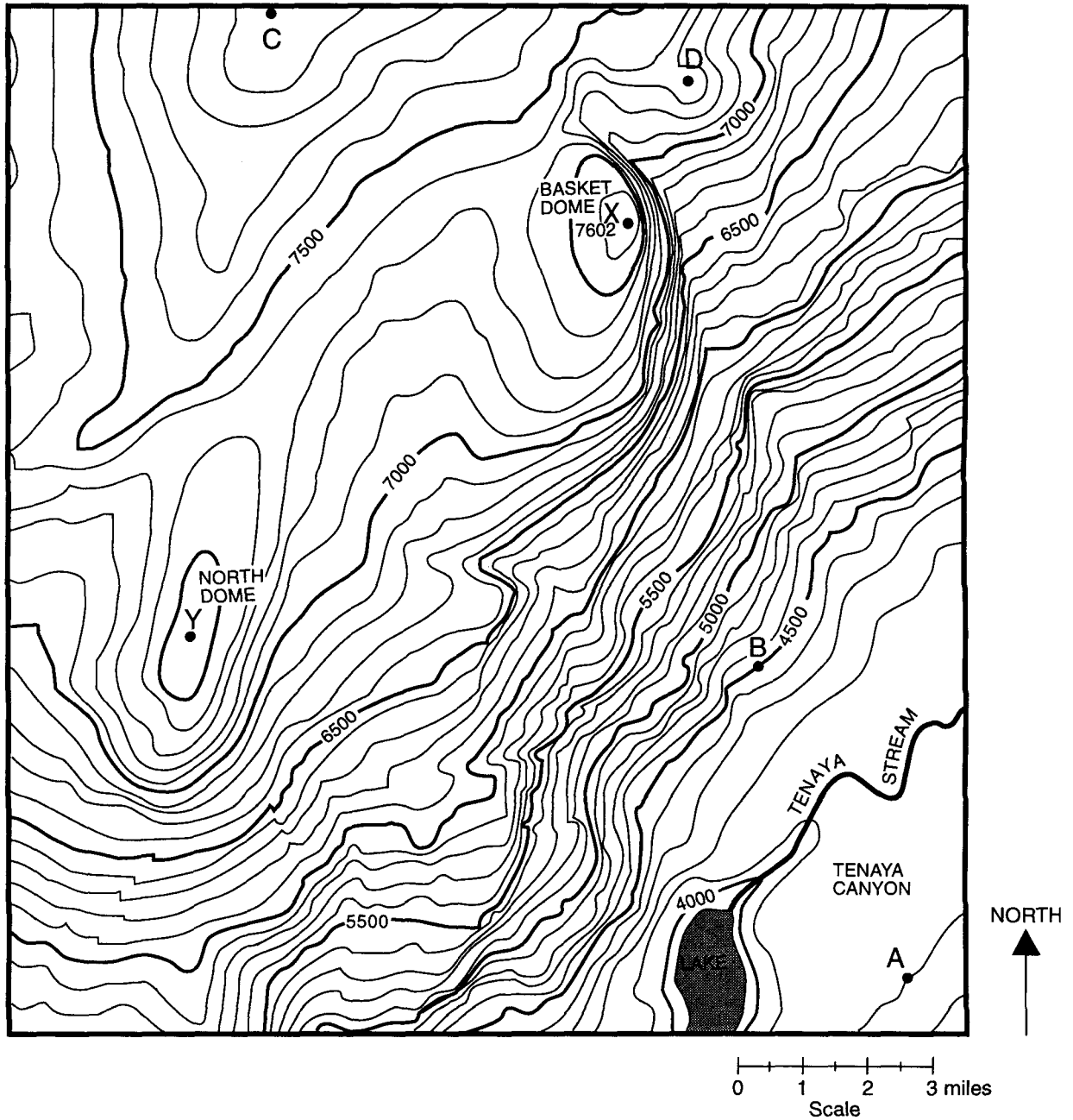
4. The diagram below represents contour lines on a topographic map with cross-section line *AB*.



Which diagram best represents the topographic profile along line *AB*?

- (1)
- (2)
- (3)
- (4)

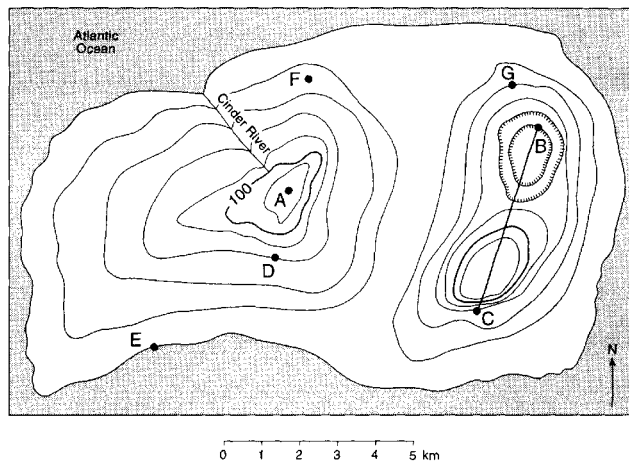
5. Base your answer to the following question on the contour map below. Points A, B, C, D, X, and Y are locations on the map. Elevations are expressed in feet. The maximum elevation of Basket Dome is indicated at point X.



In which general direction does Tenaya Stream flow?

- (1) southeast to northwest (2) northwest to southeast (3) southwest to northeast (4) northeast to southwest

Base your answers to questions 6 through 9 on the contour map of an island below. Points A through G represent locations on the island. Elevations are in meters.



6. Which point is located on the steepest slope?
(1) *F* (2) *B* (3) *C* (4) *D*
7. In which direction does the Cinder River flow?
(1) southeast (2) southwest (3) northeast (4) northwest
8. What is the contour interval for this map?
(1) 10 m (2) 15 m (3) 20 m (4) 25 m
9. Which two points have the same elevation?
(1) *G* and *F* (2) *B* and *D* (3) *C* and *D* (4) *G* and *C*

Answer Key
[New Exam]

1. 2

2. 3

3. 4

4. 1

5. 4

6. 3

7. 4

8. 3

9. 3
