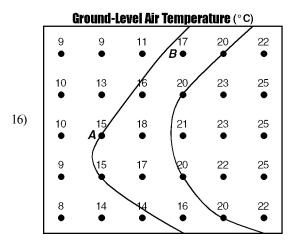
- 1) B
- 2) A
- 3) B
- 4) C
- 5) B
- 6) A
- 7) A
- 8) B
- 9) D
- 10) D
- 11) C
- 12) C
- 13) B
- 14) C
- 15) D

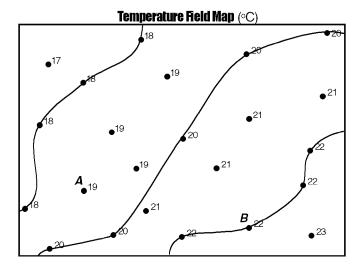


- 17) Answers will vary.
  - SAMPLE ANSWERS:

(a) 
$$g = \frac{\Delta t}{d}$$

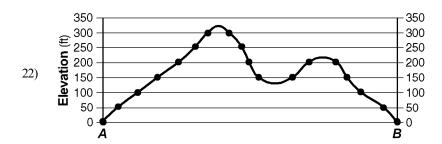
(b) gradient = 
$$\frac{2\text{C}^{\circ}}{50 \text{ m}} \text{ OR } \frac{2}{50}$$

- (c) gradient = 0.04C°/m or 0.04° C/m OR g = .04 C°/m OR .04° C/m
- 18) D
- 19) D



20)

21) 66°F

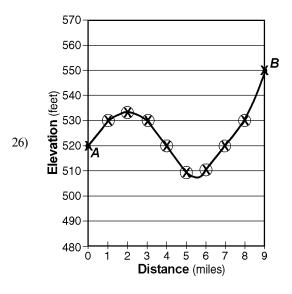


23) 25 ft/mi (±1)

24) B

25) Answers may vary.

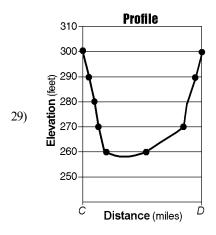
SAMPLE ANSWERS: Contour lines are closer together on the southern section of the hill. OR The south side has the greatest change in elevation per mile.



27) Answers may vary.

SAMPLE ANSWERS: south southwest OR SSW OR south or S OR southwest or SW

28)  $6 \text{ OR } 6.0 \text{ ($\pm 0.3$)}$  and feet/mile OR ft/mi



30) (a) 
$$gradient = \frac{change \ in \ field \ value}{distance}$$
;  
(b)  $gradient = \frac{310 \ ft - 260 \ ft}{0.5 \ mi}$  OR  $g = \frac{50 \ ft}{0.5 \ mi}$ ;  
(c)  $100 \ (\pm 5) \ ft/mile$ 

31) Answers will vary.

SAMPLE ANSWERS: Contour lines bend upstream when they cross a stream. They bend east along Jones Creek. OR Water flows from higher to lower elevations, and Jones Creek is higher in elevation on the east side of the map.

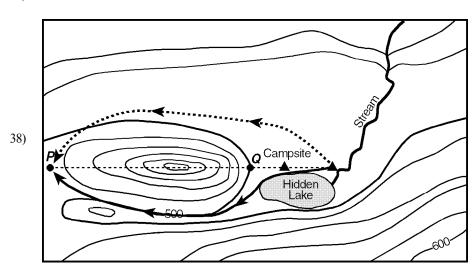
32) Answers may vary.

SAMPLE ANSWERS: Contour lines bend upstream when crossing the creek. OR The stream flows from higher elevations toward lower elevations.

33) Answers may vary.

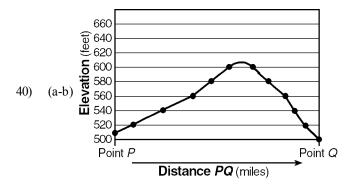
SAMPLE ANSWERS: (a,b)  $g = \frac{600 \text{ m} - 500 \text{ m}}{5 \text{ km}}$ ,  $g = \frac{100 \text{ m}}{5 \text{ km}}$ ; (c) gradient = 20 m/km OR g = 20 m/km

- 34) C
- 35) D
- 36) B
- 37) A



39) Answers may vary.

SAMPLE ANSWERS: (a) north OR northeast OR north northeast; (b) Contour lines bend upstream. OR Streams flow from higher contours to lower contours. Streams flow opposite the apex of the contour lines.



## 41) Answers may vary.

SAMPLE ANSWERS: Lack of contour lines indicates a relatively flat area. OR The stream shows meanders. OR The contour lines are spaced far apart.