Lessons 2.1–2.3

MULTIPLE CHOICE

1. **ELEVATION** The table shows the recorded elevation of a diver as a function of time.

Time, t (minutes)	Elevation, e (meters)
0	0
2	−16
4	−32
7	−56
10	−80

Which equation represents the diver's elevation e (in meters) as a function of time t (in minutes)? **TEKS A.1.B**

- **A** $e = -8t$
- **B** $e = \dfrac{8}{t}$
- **C** $e = 8t^2$
- **D** $e = 8t$

2. **TEMPERATURES** The record low temperatures (in degrees Fahrenheit) for Alaska, Arkansas, Hawaii, and California are −80°F, −29°F, 12°F, and −45°F, respectively. Which state recorded the lowest temperature? **TEKS 8.1.A**

- **F** Alaska
- **G** Arkansas
- **H** California
- **J** Hawaii

Pukeawa plant on Mauna Kea volcano in Hawaii

3. **DRY ICE** Dry ice changes directly from a solid to a gas when its temperature is about −79°C. Dry ice exists as a gas, liquid, and solid at the same time when it is at a certain pressure and its temperature increases by 22.4°C. What is the temperature (in degrees Celsius) at which this occurs? **TEKS 8.2.B**

- **A** −101.4°C
- **B** −57.6°C
- **C** −57.4°C
- **D** −56.6°C

4. **BUSINESS** In May, a store had an income of $22,556 and expenses of $17,491. In June, the store had an income of $19,418 and expenses of $24,950. What was the change in profit from May to June? **TEKS 8.2.B**

- **F** $467
- **G** $10,597
- **H** −$467
- **J** −$10,597

5. **MONEY** Your bank charges a $35 fee when the balance in your checking account is negative. You have a balance of $150 in your account. Suppose you withdraw $165 from the account. What will the balance be after the fee is charged? **TEKS 8.2.B**

- **A** −$50
- **B** −$40
- **C** −$20
- **D** $10

6. **MIGRATION** Net migration flow is the difference of the number of people migrating to a place and the number of people migrating out of a place. The table shows the number of people who migrated into and out of a certain city during the period 2002–2005. Which year had the greatest net migration flow? **TEKS 8.1.A**

Year	Number migrating into city	Number migrating out of city
2002	3179	3623
2003	3053	3632
2004	3180	3695
2005	3174	3396

- **F** 2002
- **G** 2003
- **H** 2004
- **J** 2005

GRIDDED ANSWER ⓪ ① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

7. **STOCK** An investor pays $8.64 per share of a stock. Over the next three days, the change in value of a share of the stock is −$.56, then −$1.02, and then $.94. What is the value (in dollars) of the stock at the end of the three days? **TEKS 8.2.B**