## **UNIT 8 EXERCISES 6-10**

**MONEY** 

2006B

- 6. Francesca uses 100 grams of lemon juice, 100 grams of sugar, and 400 grams of water to make lemonade. There are 25 calories in 100 grams of lemon juice and 386 calories in 100 grams of sugar. Water contains no calories. How many calories are in 200 grams of her lemonade?
  - **(A)** 129
- **(B)** 137
- **(C)** 174
- **(D)** 223
- **(E)** 411

2018B

6. Suppose S cans of soda can be purchased from a vending machine for Q quarters. Which of the following expressions describes the number of cans of soda that can be purchased for D dollars, where 1 dollar is worth 4 quarters?

(A) 
$$\frac{4DQ}{S}$$
 (B)  $\frac{4DS}{Q}$  (C)  $\frac{4Q}{DS}$  (D)  $\frac{DQ}{4S}$  (E)  $\frac{DS}{4Q}$ 

$$(B) \frac{4DS}{Q}$$

(C) 
$$\frac{4Q}{DS}$$

$$(D) \frac{D\zeta}{4S}$$

(E) 
$$\frac{DS}{4Q}$$

2003B

- 7. Penniless Pete's piggy bank has no pennies in it, but it has 100 coins, all nickels, dimes, and quarters, whose total value is \$8.35. It does not necessarily contain coins of all three types. What is the difference between the largest and smallest number of dimes that could be in the bank?
  - **(A)** 0
- **(B)** 13
- (C) 37
- **(D)** 64
- **(E)** 83

2002A 9. Jamal wants to store 30 computer files on floppy disks, each of which has a capacity of 1.44 megabytes (mb). Three of his files require 0.8 mb of memory each, 12 more require 0.7 mb each, and the remaining 15 require 0.4 mb each. No file can be split between floppy disks. What is the minimal number of floppy disks that will hold all the files?

- **(A)** 12
- **(B)** 13
- **(C)** 14
- **(D)** 15
- **(E)** 16