



Lessons 1.1–1.4

MULTIPLE CHOICE

1. **PHOTO QUILT** You are making a photo quilt by transferring photos to 48 rectangular pieces of fabric. Each rectangle is 3 inches long and 2 inches wide. The fabric you buy is 24 inches wide. How long a piece of fabric do you need? **TEKS a.1**
- (A) 8 in. (B) 12 in.
(C) 16 in. (D) 18 in.
2. **STRAWBERRIES** You pay \$7.50 for 3 quarts of strawberries. Later, you realize your recipe calls for 5 quarts of strawberries. How much will the additional strawberries cost? **TEKS a.4**
- (F) \$2.50 (G) \$5
(H) \$5.50 (J) \$12.50
3. **CALORIES** The number of calories in one serving of any food is the sum of the calories from fat, protein, and carbohydrate. The table shows the calories in 1 gram of each of the three food components.

Component	Calories in 1 gram
Fat	9
Protein	4
Carbohydrate	4

A serving of cheddar cheese contains 14 grams of fat, 11 grams of protein, and 1 gram of carbohydrate. How many calories are in a serving of cheddar cheese? **TEKS a.4**

- (A) 70 calories (B) 141 calories
(C) 174 calories (D) 234 calories
4. **MINIATURE CARS** You collect miniature cars and display them on shelves that hold 20 cars each. Which expression describes the number of shelves needed for any number of miniature cars? **TEKS A.3.A**
- (F) $\frac{x}{20}$ (G) $\frac{20}{x}$
(H) $20x$ (J) Not here

5. **GARDENING** A gardener has a rectangular garden with a length of 10 feet and a width of 5 feet. The gardener plans to increase the length of the garden by 3 feet. What will the area of the enlarged garden be? **TEKS a.1**
- (A) 25 ft^2 (B) 26 ft^2
(C) 65 ft^2 (D) 80 ft^2

6. **BIKE FRAME** The ideal height (in centimeters) of a mountain bike frame is about 10 centimeters less than two thirds of the bike rider's leg length (in centimeters). Two riders' leg lengths are 80 centimeters and 85 centimeters. To the nearest tenth of a centimeter, how much taller should the taller mountain bike frame be? **TEKS a.4**
- (F) 3.3 cm
(G) 5 cm
(H) 13.3 cm
(J) 23.3 cm



7. **REFRIGERATORS** You are comparing two dorm-size refrigerators, both with cube-shaped interiors. One model has an interior edge length of 14 inches. Another model has an interior edge length of 16 inches. How many more cubic inches of storage space does the larger model have? **TEKS a.1**
- (A) 8 (B) 360
(C) 1352 (D) 4096

GRIDDED ANSWER 0 1 2 3 4 5 6 7 8 9

8. **CHARITY RACE** A runner has three sponsors for a charity race. For each mile the runner completes, one sponsor pays \$1.50, another pays \$3, and a third pays \$2.50. Suppose the runner completes 5 miles. How much (in dollars) do the sponsors pay altogether? **TEKS a.4**