## Level A - Form 1 - Applied Mathematics: Estimation

## Sample Question

Gary spent \$15.15 for a shirt and \$40.85 for a jacket. About how much did he spend in all?

- A \$53.00
- B \$54.00
- C \$55.00
- D \$56.00

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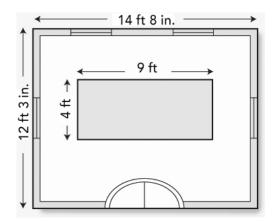
The advertisement shows special February prices at Emerald Lake Resort. Study the ad. Then do Numbers 1 through 4.



- About how much would you save in February on a room regularly priced at \$167.83?
  - A \$10.00
  - B \$34.00
  - C \$20.00
  - D \$43.00
- 2. About how much would a 5-day spa membership cost for a couple?
  - F between \$60.00 and \$65.00
  - G between \$55.00 and \$60.00
  - H between \$65.00 and \$70.00
  - J between \$50.00 and \$55.00

- 3. For their tenth wedding anniversary, Chris and Jamie are spending a weekend at the resort. They will pay \$98.15 per night with the February discount and add on the spa membership and romance package. If they were to estimate their total cost per day by rounding to the nearest dollar, which numbers would they use?
  - A \$98, \$13, and \$24
  - B \$98, \$13, and \$25
  - C \$98, \$12, and \$24
  - D \$98, \$12, and \$25
- 4. The average price a couple spends per room is \$160 per day. Which of these best describes the range of prices for a weeklong stay?
  - F between \$700 and \$1,500
  - G between \$1,500 and \$3,000
  - H between \$100 and \$200
  - J between \$500 and \$700

The diagram shows the floor plan of a dining room with a table placed in the center. Study the diagram. Then do Numbers 5 through 9.



- 5. About what fraction of the room will be taken up by the dining room table?
  - $A \frac{1}{5}$
  - $B \frac{1}{6}$
  - $C \frac{1}{2}$
  - $D \frac{1}{4}$
- 6. Lawrence wants to place a wallpaper border around the room. Each roll of wallpaper is 10 feet long. Which is the best estimate of the amount of wallpaper he should buy?

F 3 rolls

G 4 rolls

H 5 rolls

J 6 rolls

7. Lawrence wants to buy an 8 ft by 10 ft area rug for his dining room. He sees an ad for a rug sale that shows 5 ft by 8 ft rugs for \$185 and 11 ft by 12 ft rugs for \$458. Which is the best estimate of the price of an 8 ft by 10 ft rug?

A \$190

B \$250

C \$325

D \$425

8. Lawrence decides to wallpaper three of the walls. He finds that it takes 8 minutes to cut and hang one strip of wallpaper. He knows that he must hang 22 strips of wallpaper in all. Which of these is the best estimate of how long it will take to hang all 22 strips?

$$F 4\frac{1}{2}$$
 hours

G 5 hours

H 3 hours

 $J 2\frac{1}{2}$  hours

9. In remodeling his dining room, Lawrence spent \$456.38 for a new table, \$38.25 for curtains, and \$132.50 for wallpaper. If he is estimating his total costs by rounding to the nearest dollar, which numbers should he use?

A \$456.00, \$38.00, and \$132.00

B \$457.00, \$38.00, and \$133.00

C \$456.00, \$38.00, and \$133.00

**D** \$457.00, \$38.00, and \$132.00

- 10. At a market, a one-pound bag of sugar costs \$1.26. A three-pound bag of sugar costs \$4.18. Which is the best estimate of the cost of a two-pound bag of sugar?
  - F \$1.50
  - **G** \$2.50
  - H \$3.00
  - J \$3.50
- 11. You read in the newspaper that 70,000 people attended the art festival. In reality, 68,975 people attended the festival. To what place value was the 68,975 rounded to get 70,000?
  - A hundreds place
  - B thousands place
  - C ten-millions place
  - D ten-thousands place
- 12. An almanac reports that in the year 2000, California had a population of 33,871,648. Which of these is the population rounded to the nearest million?
  - F 30,000,000
  - **G** 34,000,000
  - H 33,800,000
  - J 33,900,000
- 13. It takes Monica 40 to 50 feet of yarn to crochet a scarf. About how much yarn will Monica use to make 5 scarves?
  - A 275 feet
  - B 200 feet
  - **C** 225 feet
  - **D** 250 feet

- **14.** For a concert, about 11,600 tickets were sold. Which set of tickets would give this estimated amount?
  - F 7,585 adult tickets, 3,711 child tickets, and 625 senior tickets
  - G 7,275 adult tickets, 3,619 child tickets, and 815 senior tickets
  - H 6,285 adult tickets, 3,810 child tickets, and 972 senior tickets
  - J 7,183 adult tickets, 3,521 child tickets, and 854 senior tickets
- **15.** Charles makes \$24,283 per year. Estimate how much he makes per month.
  - A \$2,000
  - B \$2,500
  - C \$3,500
  - D \$3,000
- 16. Two friends drove  $6\frac{3}{4}$  hours at a speed of
  - 58 miles per hour. About how many miles
  - did they travel?
    - F 360 miles
    - G 420 miles
    - H 350 miles
    - J 300 miles
- **17.** What is 56.97 rounded to the nearest tenth?
  - A 56.0
  - B 57.0
  - C 56.9
  - D 57.9

- 18. A tiger cub gains about one-quarter pound per day for the first few weeks of life. How much will a 3-pound newborn cub weigh after two weeks?
  - F 3 to 4 pounds
  - G 4 to 6 pounds
  - H 6 to 7 pounds
  - J 9 to 11 pounds
- 19. Scott paid \$23,499 for his new car. Rounded to the nearest thousand, how much did he pay for his car?
  - A \$24,000
  - B \$23,000
  - C \$23,500
  - D \$20,000

- 20. Lucinda estimates that her ice cream shop will have average monthly sales of \$11,000 next year. Which of these best describes the estimated yearly sales?
  - F between \$10,000 and \$12,000
  - **G** between \$60,000 and \$72,000
  - H between \$120,000 and \$144,000
  - J between \$100,000 and \$120,000