

**Business Department**  
**Thursday, April 2<sup>nd</sup>**  
**Level 4 question**

1. The truck that you drive for a living cannot go under low overpasses. One overpass is labeled as being 9 yards above the road. About how many meters is this?
- A.** 2.74
  - B.** 3.05
  - C.** 8.23
  - D.** 9.00
  - E.** 27.43

**Answer: C** Use the formula sheet to convert from yards to feet 1 yard = 3 feet Therefore  $9 \times 3 = 27$  feet  
Use your formula sheet to see that 1 foot = 0.3048 meters Therefore  $27 \times 0.3048 = 8.23$

**Business Department**  
**Tuesday, April 7<sup>th</sup>, 2009**  
**Level 4 question**

2. The plumber that you work for hands you a length of pipe that is  $12\frac{1}{16}$  inches long. She asks you to cut  $3\frac{1}{8}$  inches off of one end and  $1\frac{5}{16}$  inches off of the other end. How long is the pipe after you make both cuts?
- A.**  $7\frac{3}{16}$  inches
  - B.**  $7\frac{5}{8}$  inches
  - C.**  $8\frac{1}{8}$  inches
  - D.**  $8\frac{3}{16}$  inches
  - E.**  $8\frac{5}{8}$  inches

**Answer: B**  $12\frac{1}{16} - 3\frac{1}{8} - 1\frac{5}{16} = 7\frac{5}{8}$

**Business Department**

Thursday, April 9<sup>th</sup>, 2009

Level 4 question

3. As an assistant coach, you must determine the average number of points each player scores during the season. One of the players scores the following numbers of points in each of 6 games: 15, 14, 5, 8, 25, and 12. Which is the average number of points that he scored per game?
- A. 5.3
  - B. 6.6
  - C. 12.1
  - D. 13.2
  - E. 79.0

**Answer: D**  $(15 + 14 + 5 + 8 + 25 + 12) \div 6 = 13.2$

**Business Department**

Tuesday, April 14<sup>th</sup>, 2009

Level 6 question

4. Your supervisor would like you to hire the least expensive moving service to transport some stock from one store to another. A Man and a Van charges \$1 per box in addition to a fee of \$100 for moving boxes. Action Movers charge \$60 per hour. There are 300 boxes to be moved. If it will take 6 hours to move the boxes, how much will the moving job cost, using the least expensive moving service?
- A. \$160
  - B. \$360
  - C. \$400
  - D. \$600
  - E. \$700

**Answer: B** Man and a Van  $\$1 \times 300 + \$100 = \$400$   
Action Movers  $\$60 \times 6 = \$360$

**Business Department**

Thursday, April 16<sup>th</sup>, 2009

Level 5 question

5. You are painting a wall that measures  $84\frac{1}{4}$  feet by  $10\frac{1}{2}$  feet. The paint comes in 1-gallon cans that each contain enough paint to cover 200 square feet. How many cans of paint must you purchase to paint the entire wall?
- A. 1
  - B. 4
  - C. 5
  - D. 8
  - E. 9

**Answer: C**  $84.25 \times 10.5 = 884.625 \div 200 = 4.4$  therefore you need to purchase 5 cans

**Business Department**

Tuesday, April 21<sup>st</sup>, 2009

Level 6 question

6. The construction company you work for is installing a decorative fountain. At the bottom of the fountain, beneath the surface of the water, are 24 spherical light fixtures. Each light fixture has a radius of 4 inches. What is the approximate number of gallons of water which all 24 light fixtures will displace?
- A. 1
  - B. 4
  - C. 28
  - D. 268
  - E. 6,431

**Answer:** C Using your formula sheet look for the volume of a sphere and how many cubic inches in a gallon of water.  $\frac{4}{3} \times 3.14 \times 4^3 \times 24 \text{ fixtures} = 6430.72 \text{ cubed inches} \div 231 \text{ cubed inches} = 27.84$  gallons