

**VI. Desserts (Pick 1)**

- a. Kyle earned \$12,000 last year by giving golf lessons. He invested part of it at 8% and the rest at 9%. He earned a total of \$1,050 in interest. How much did he invest at each rate?
- b. Jon lost his 3rd test of the quarter. His other test grades were: 85, 79, 92, and 84. His test average was 86.4%. What was his score on his 3rd test?

*Thank you for joining us for dinner.*

**Hoover's  
Ristorante**



*The best pizza in town*

**I. Appetizers (Pick 2)**

- a. Solve for R.  $PV = nRT$
- b. Solve for w.  $V = lwh$
- c. Solve for b.  $A = \frac{1}{2}bh$
- d. Solve for x.  $y = mx + b$

**II. Salads (Pick 1)**

- a. The perimeter of a rectangular pool is 36 meters, and the width is 3.5 meters. Find the length of the pool.
- b. A newspaper recycling collection bin is in the shape of a box, 1.5 feet wide and 5 feet long. If the volume of the bin is 75 cubic feet, find the height.

**III. Entries (Pick 10)**

- a. Bob and Mary had an argument. They got into their cars and drove in opposite directions. Bob realized the error of his ways and decided to call Mary on his cell phone. They were 405 miles apart. They turned around and began driving towards each other. Bob at 65 mph and Mary at 70 mph. How long did it take them to meet?
- b. Captain Jones took 30 minutes to drive the U.S.S. Fremont Upstream to his favorite fishing spot. Coming back downstream at the same speed, it took him 22 minutes. If the current was 6 mph, find the boat speed.

**IV. A La Carte (Pick 1)**

- a. Carlos can complete a certain job in 12 hours. His helper, Juan, needs 20 hours to do the same job. How long would it take them to complete the job if they worked together?
- B. If Mr. Jancek can hunt you down in 2 minutes during a hall sweep and Ms. Statler can hunt you down in 5 minutes, how long will it take them working together?
- c. Key Club members went to a farm to do some community service. Mrs. Hoover could shovel manure in 4 hours. Mrs. Heisel could have done it in 2 hours. How long would it take them working together?

**V. Beverages (Pick 1)**

- a. An 89% acid solution is to be mixed with a 65% acid solution. How many liters of each solution should be used to make 30 liters of the 72% acid solution?
- b. It is necessary to have 40% anti-freeze solution in the radiator of Eric's Jaguar. The radiator now holds 20 liters of 20% solution. How many liters of this should be drained and replaced with a 100% solution anti-freeze to get the desired strength?