Oak Grove
Math Superstars

Due Dates:

Session	Last Monday of
1	September
2	October
3	November
4	January
5	February
6	March

Grade 5

Session 2 - Answers

(50 points total; 10 points deducted if late)

Problem 1 (5pts):

Grader: 1.2 points per correct item. Sum up and round up to nearest integer.

Use each of the following items once to satisfy the equality below: {2, 4, 6, 8}

(8 ÷ 4) + (2 x 6) = 14

Problem 2 (5pts):

Grader: 1.2 points per correct item. Sum up and round up to nearest integer.

Use each of the following items once to satisfy the equality below: {2, 3, 4, 7}

((7 + 2 x 4)÷ 3) = 5

Problem 3 (10pts):

Grader: 5 pts per correct answer. 1 pt for each attempted but incorrect.

A tennis racquet is sold for $25.00 in a county where sales tax is 7.5%. What is the total cost of the racquet? How much change would you receive from $40.00?

Total cost: $26.88

Change: $13.12

Problem 4 (10pts):

Grader: 5 pts per correct answer. 1 pt for each attempted but incorrect.

Carrol lives in Los Angeles and her cousin David lives in San Francisco. The two cities are 381 miles apart. They want to meet somewhere in between the two cities. They start at 8:00 am in the morning. Carrol drives at 67 miles per hour, and David drives at 60 miles per hour. What time will they meet?

Amount of time: 381 ÷(67 + 60) = 3 hours;

Arrival time: 11:00 am

Problem 5 (10pts):

Grader: 10pts for right answer. 5pts if answer between 360 and 442, else 2pts for attempting.

Students arrive for school in groups. Bill is the first to arrive (consider him as the "first group"). Each group that arrives after Bill has two more people than the prior group. How many people were in school after 20 groups arrived?

Answer: 400 = 1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 + 19 + 21 + 23 + 25 + 27 + 29 + 31 + 33 + 35 + 37 + 39 = 20^2

Problem 6 (5 points):

Grader: 5 points if correct.

You have a friend in another country where they measure temperature in degrees Celsius. She wants to know what the temperature will be in Atlanta on Halloween night. The predicted temperature for Halloween night is 59 degrees Fahrenheit. Convert this temperature to degrees Celsius for your friend. The conversion formula is: °C = (°F – 32) x 5/9. 59 °F = 15 °C?

Problem 7 (5pts):

Grader: 5pts if correct.

Benjamin works in the Student Union store. He sold 39 notebooks and 57 book covers. The notebooks cost each $3.17 each and the book covers cost $2.13 each. What is the total cost of Benjamin's sales?

Answer: 245.04 = 39 x 3.17 + 57 x 2.13