Week of July 6-10

Middle School Summer Math Challenge (Incoming 6th grade)

* Required

1. Student Number *

2. My name is: *

3. Next year I will be attending *
   
   Mark only one oval.

   - Eisenhower Middle School
   - Evergreen Middle School
   - Gateway Middle School
   - Heatherwood Middle School
   - North Middle School
   - Other

A company that manufactures boxes for cereal wants to come up with a new design. They have the following options for dimensions for the new boxes: 3×4×6; 4×5×5; 4×4×5; 6×6×2
4. Which dimensions would you recommend to the company if they want to make a cereal box with the largest volume?

Mark only one oval.

- 3×4×6
- 4×5×5
- 4×4×5
- 6×6×2

5. Which dimensions would you recommend to the company if they want to make a cereal box with the smallest volume?

Mark only one oval.

- 3×4×6
- 4×5×5
- 4×4×5
- 6×6×2

6. Find the minimum value of 1 @ 2 @ 3 @ 4 @ 5 @ 6 @ 7 @ 8 @ 9, replacing each @ with either a plus sign (+) or a multiplication sign (×). Each sign must be used at least once.

Mark only one oval.

- 44
- 45
- 46
- 50
7. 4. Lindsay drew a rectangle. She drew another rectangle that was double the length and double the width of the first rectangle. She noticed something interesting about the area of the new rectangle, so she drew a third one. For this third rectangle, she doubled the length and width of the second rectangle. She repeated this process to draw a fourth rectangle. What do you think Lindsay was noticing about the relationship between the areas of the rectangles she made?

Mark only one oval.

☐ They also double in size
☐ They increase 4 times the original
☐ They increase 8 times the original
☐ They increased 16 times the original

8. 5. A performance hall that is 30 feet wide and 60 feet long is being renovated and the floor is being re-tiled. How many more tiles will be needed if 8 inch square tiles are used instead of 9 inch square tiles?

Mark only one oval.

☐ 22
☐ 850
☐ 3200
☐ 4050

This content is neither created nor endorsed by Google.