Week of Aug. 3-7
Middle School Summer Math Challenge
* 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
4. The figure below shows a circle inscribed in a square of side length 8 units. The shaded region is also a square, formed by connecting the midpoints of the larger square. What is the area of the region between the circle and the shaded square? (round to nearest tenth place)

Mark only one oval.

- 13.7 sq units
- 16 sq. units
- 18.3 sq. units
- 44.6 sq. units

5. How many of the first 1000 positive integers are multiples of both 4 and 5 but not of 6?

Mark only one oval.

- 20
- 28
- 34
- 44
6. 3. The letter x represents the units digit of the five-digit number 1571x. If the five-digit number is divisible by 6 and x is not 0, what number could x be?

Mark only one oval.

☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9

7. 4. During the first half of a basketball game, the home team made 70% of their 30 attempted field goals. In the second half, the team made 30% of their 50 attempts. What was their overall field goal percentage for the entire game? (Note: Free throws are not counted as field goals.)

Mark only one oval.

☐ 12.5%
☐ 36%
☐ 45%
☐ 50%
8. How many terms are in the arithmetic sequence 5, 12, 19, ..., 355? (5, 12, 19 are individual terms)

*Mark only one oval.*

- [ ] 50
- [ ] 51
- [ ] 52
- [ ] 53