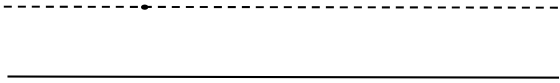
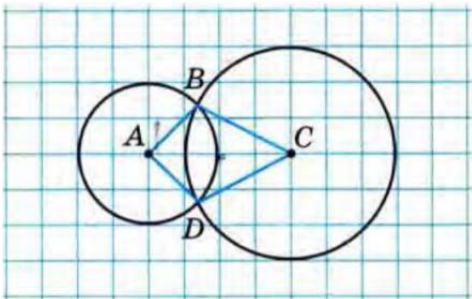


Math5 Battle March 25 2018

- Given a line and a point not on the line, can you construct with a ruler and compass a new line that is parallel to the original line and goes through the point?



- Given 3 segments a, b, c. Construct a triangle using ruler and compass.
- Find the perimeter of the quadrilateral ABCD if the side of the square of the grid is 5 mm.



- What is the number
of the car's parking space?**



- How many ways one can arrange 5 different books on a shelf?
- Explain the rule, why 4 is the magic number:
 - 1, 3, 5, 4
 - 80, 6, 3, 5, 4
 - 100, 10, 3, 5, 4
- Solve the equation $9876 - 2(9876 - 2(9876 - 2x)) = x$
- Find the remainder upon division by 99 of $1000 \dots 0$ (98 zeros). *Hint: what is the remainder upon division by 99 of 100?*