Math 5b, homework 20.

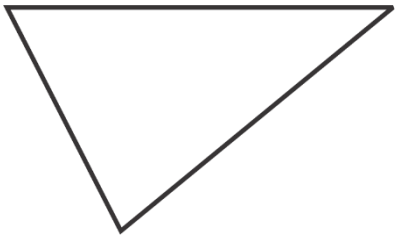
1. x, y, and k are three different digits. If all six three-digit numbers that can be created from these digits without repetition are added together, the result will be 5328. What are the digits?

2. What would be the last digit of the value of the expression:
$$94^6 + 76^6 + 51^6$$

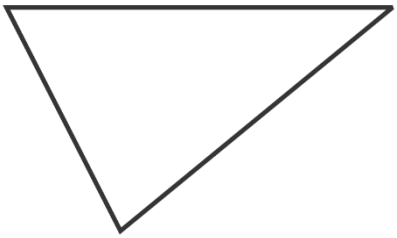
3. Prove that if the sum of four natural number is odd, their product is even.

4. Draw medians in a triangle a, bisectors in a triangle b, highs in a triangle c.
Median is a segment in a triangle, joining a vertex and a midpoint of an opposite side.
An angle bisector of an angle of a triangle is a straight line that divides the angle into two congruent (equal) angles.
A heigh (altitude) of a triangle is segment of a line, perpendicular to a side of a triangle, passing through the vertex, opposite to the side.

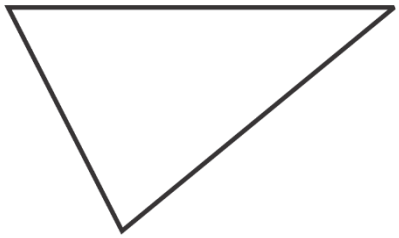
a.



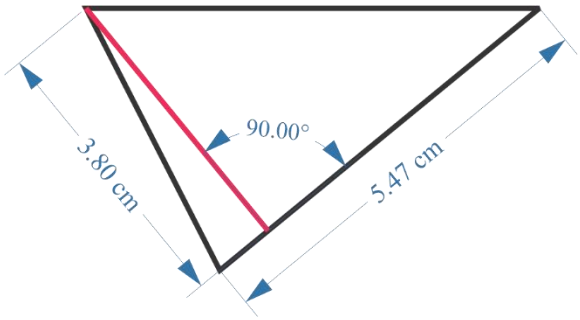
b.



c.

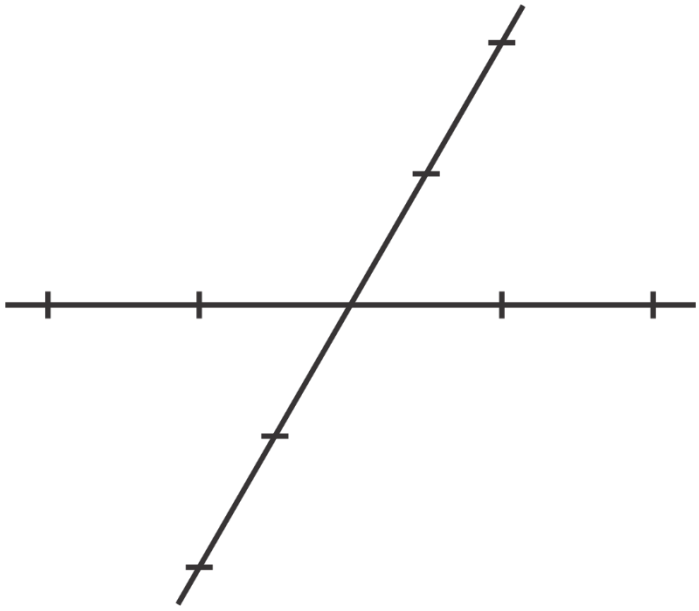
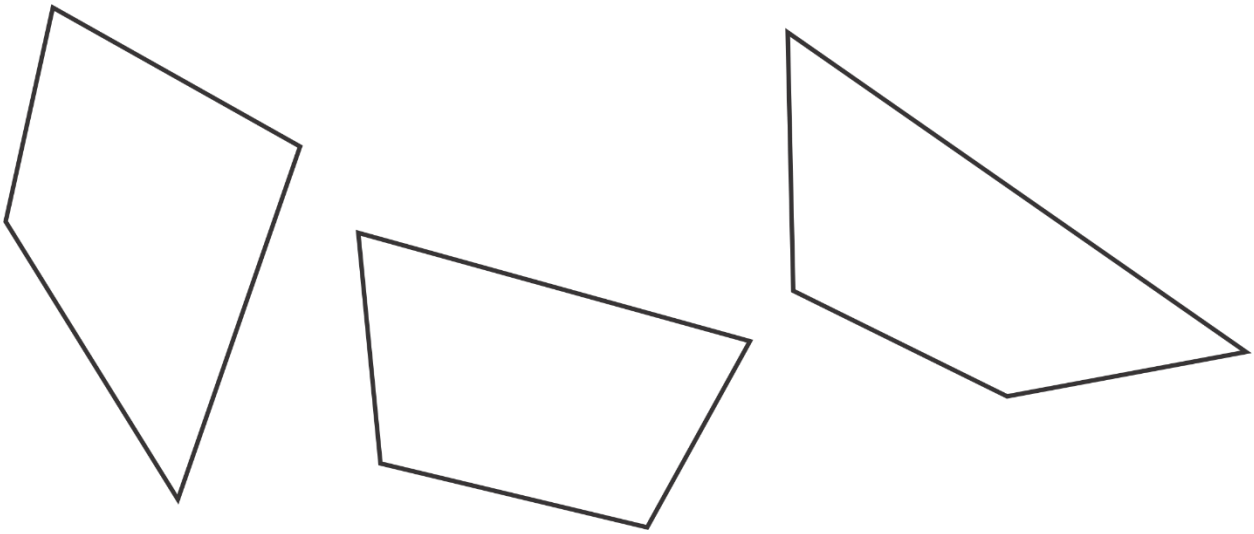
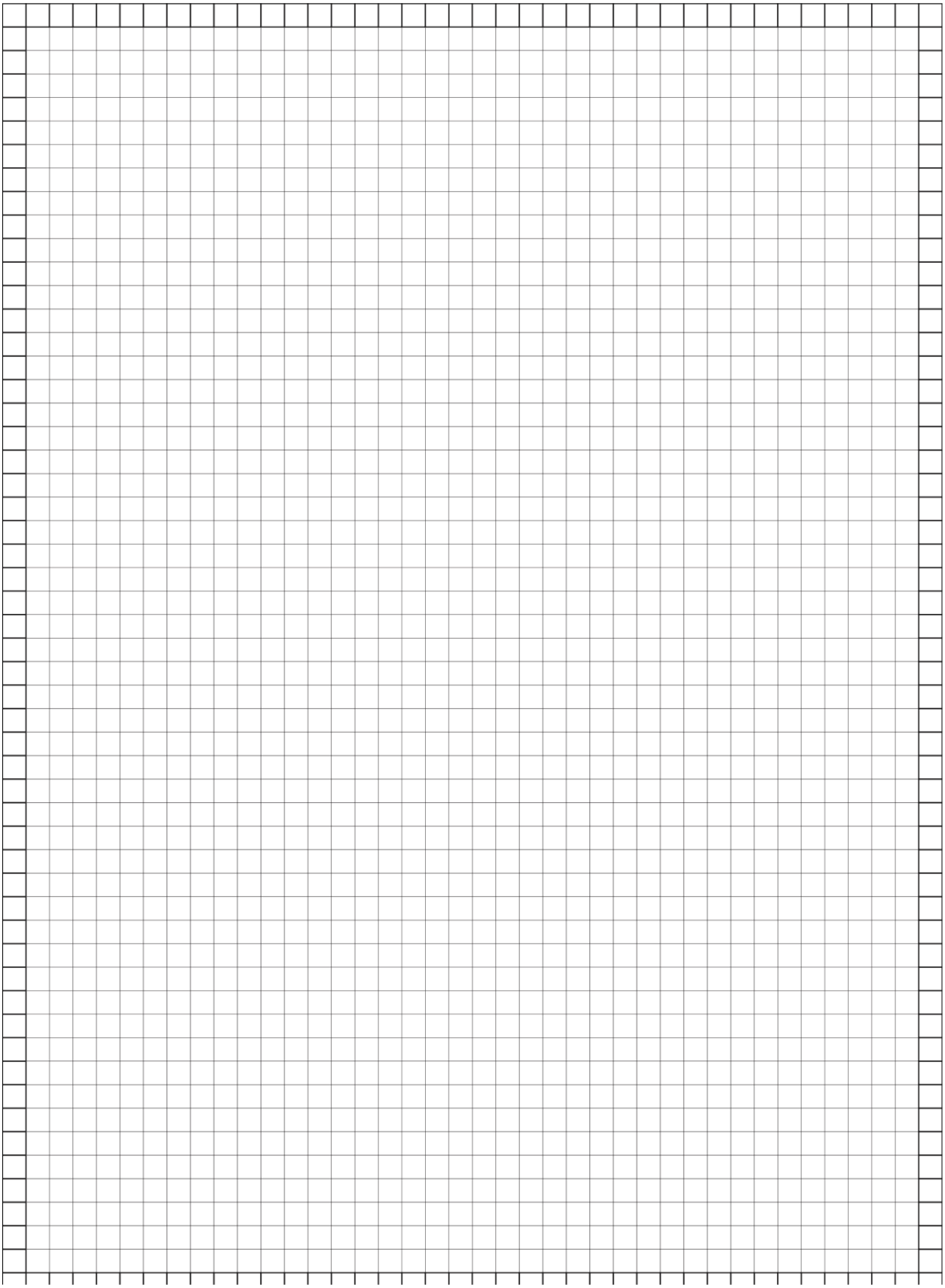
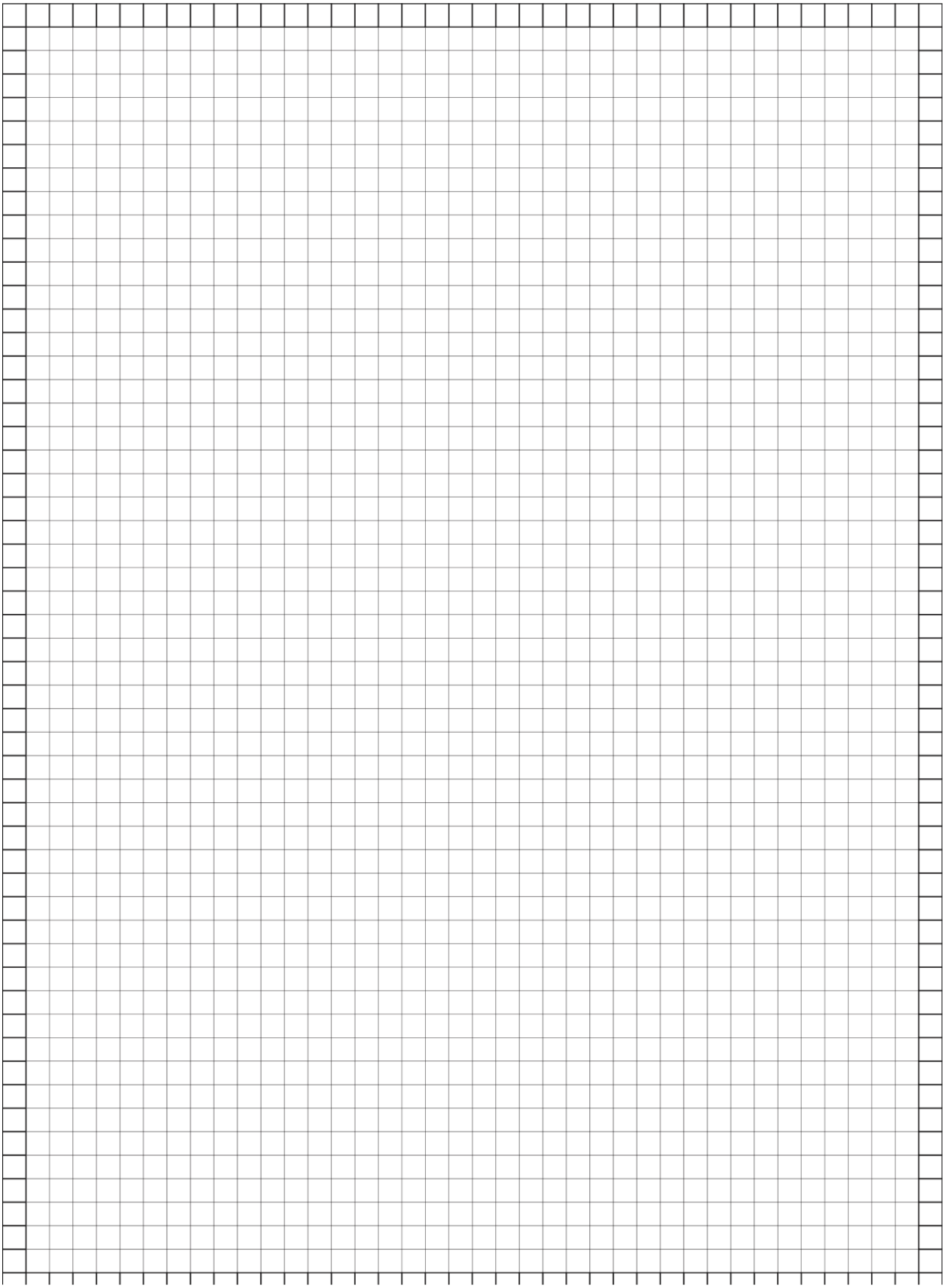


5. Find the area of the triangle on the picture:



6. The sum of two numbers is 51. What are these numbers if 30% of one number equals 60% of the other number?

7. Draw lines, parallel to lines a and b through marks on the picture below (use ruler).



8. On the quadrilaterals below, mark the midpoints if the sides, connect midpoints. What shape did you get by connecting the midpoint of the side of quadrilaterals?