Algebra and Geometry 1. Homework 24.

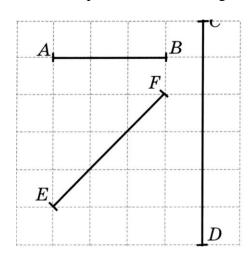


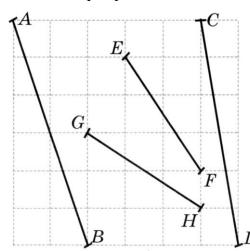
- 1. List all topics you want to be reviewed.
- 2. Prove that (57! + 58!) is divisible by 59.
- 3. Find all possible 2-digit numbers \overline{ab} that

$$a. \ \overline{ab} + \overline{ba} = 77$$

$$b. \quad \overline{ab} + \overline{ba} = 121$$

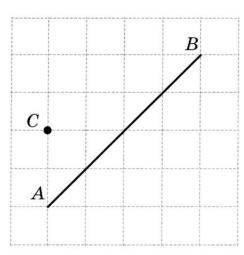
- 4. Draw 4 straight line so they have 4 pairwise intersections, 5 or 6.
- 5. Find the points divided the segments into three equal parts.

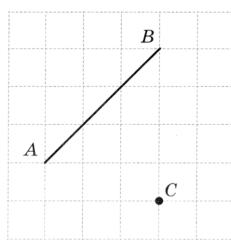




6. Through the point C draw the line perpendicular to line AB. Explain your answer. Use ruler.

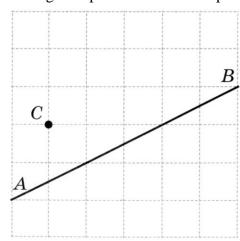
A B

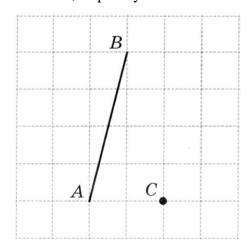




7. Draw three triangles. In the first triangle draw three medians, to the second triangle draw three bisectors, and in the third triangle draw three altitudes (heights). Use ruler, protractor.

8. Through the point C draw a line parallel to the line AB, Explain your answer. Use ruler.





9. Evaluate:

a.
$$\frac{5^3 \cdot 7^4}{35^3}$$
;

$$b. \quad \frac{22^6}{4^3 \cdot 11^7}$$

b.
$$\frac{22^6}{4^3 \cdot 11^7}$$
; c. $\frac{33^5}{9^3 \cdot 121^2}$;