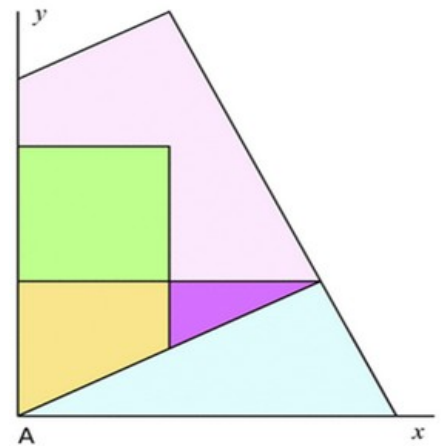


DNL – 5ème - Sam Loyd's puzzle

1. Building the puzzle's pieces

- a. Draw two perpendicular rays $[Ax)$ and $[Ay)$.
- b. Draw a circle which center is A and radius measures 7,5 cm. The intersection point of this circle and $[Ax)$ is B. The intersection point of this circle and $[Ay)$ is C.
- c. On the line segment $[AC]$, place the points E and F so that: $AE = EF = 3$ cm.
- d. Draw a line perpendicular to (AE) that goes through E. On this line, place the points G and H so that: $EG = GH = 3$ cm.
- e. Draw the line (BH) . Then draw a line perpendicular to (BH) that goes through C. The intersection point between this line and (BH) is called J.
- f. Draw the line segment $[AH]$.
- g. Draw a line $(d1)$ that is perpendicular to (AE) and goes through F.
- h. Draw a line $(d2)$ that is perpendicular to (EH) and goes through G. The intersection point with $[AH]$ is I. The intersection point with $(d1)$ is K.
- i. Erase all the lines that are not necessary in order to obtain the adjacent figure.
- j. Cut up the five pieces of this puzzle.



2. Using the puzzle

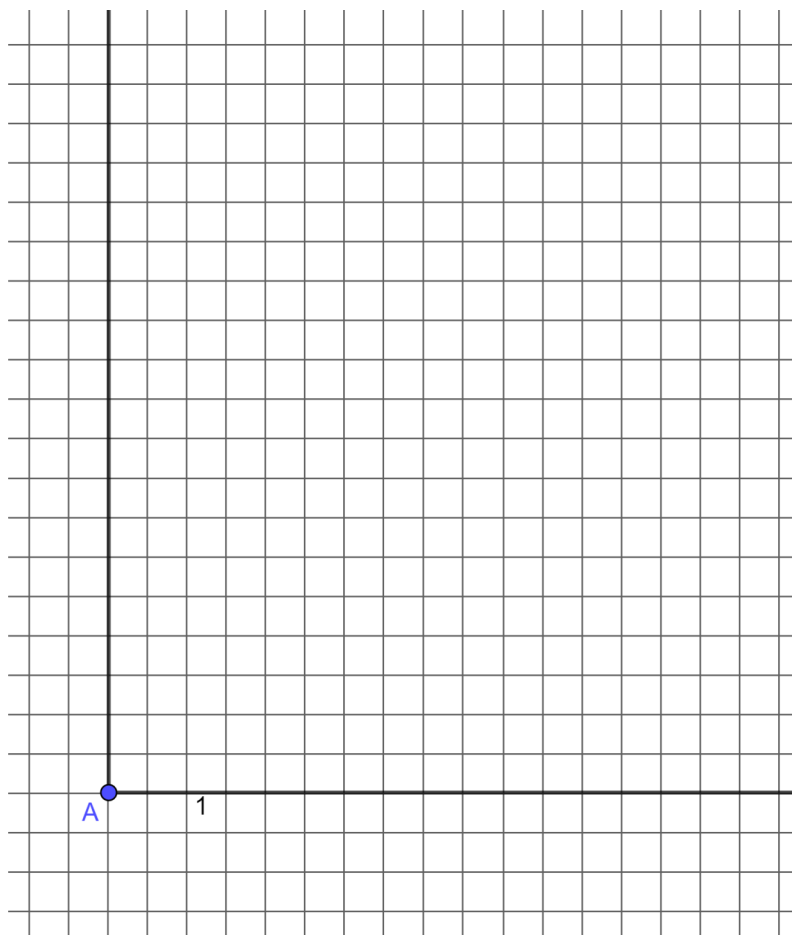
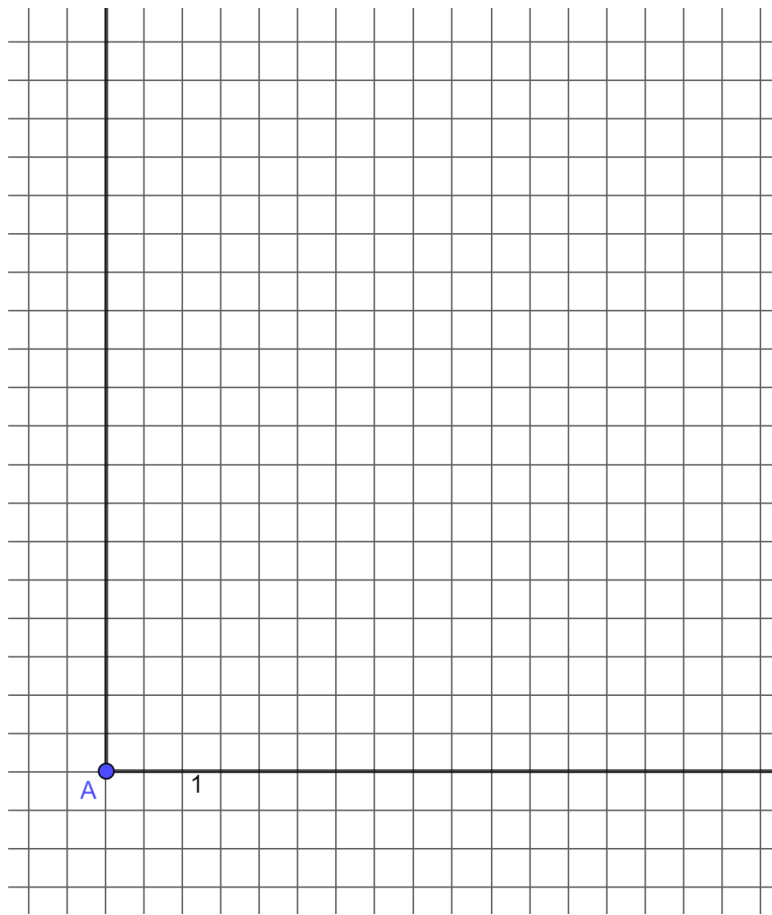
Use all the pieces of the puzzle in order to get:



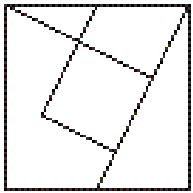
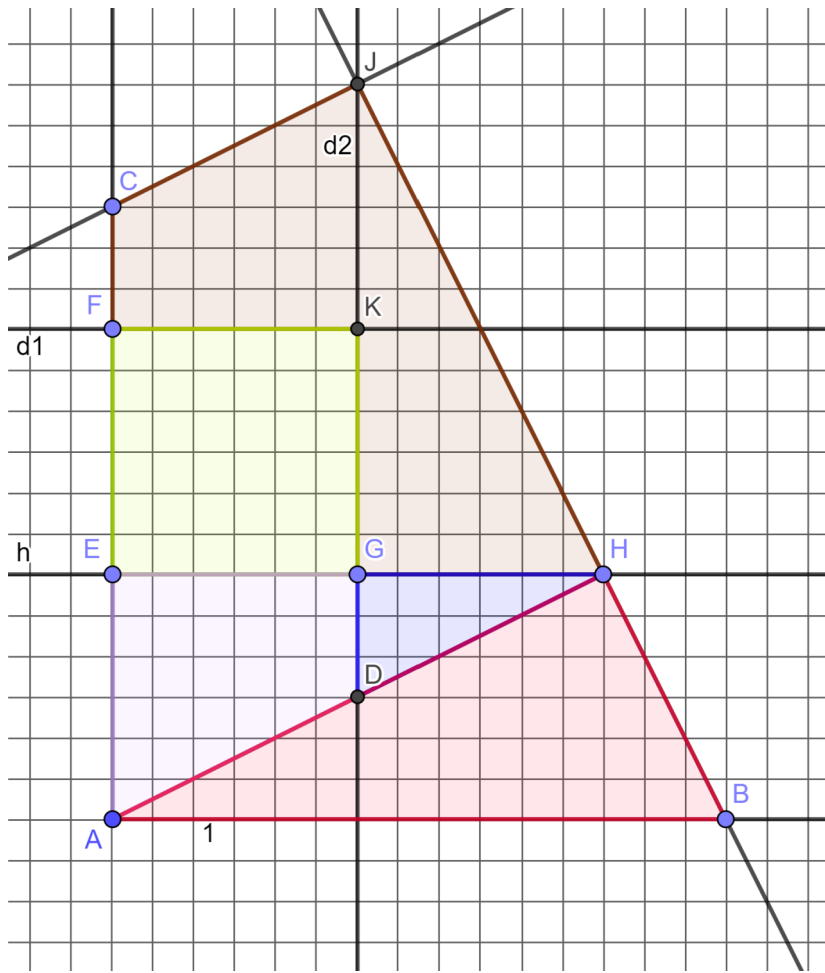
Draw a solution on your notebook for each of these figures.



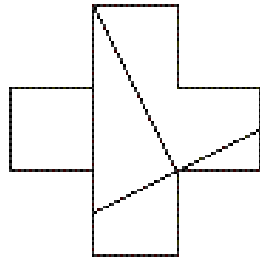
Grid Paper



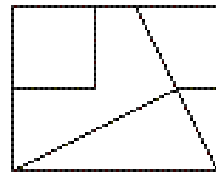
SOLUTIONS



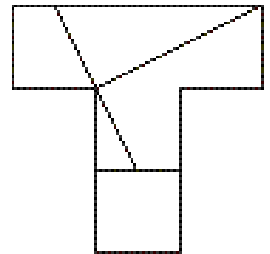
Square



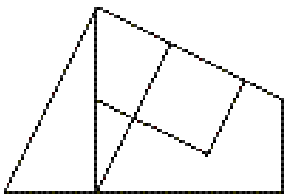
Cross



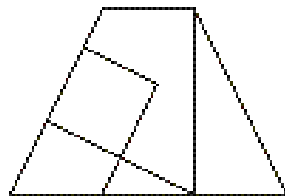
Rectangle



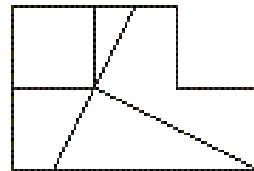
T



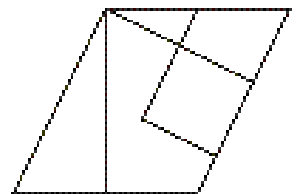
Quadrilateral



Trapeze



Two Squares



Rhombus