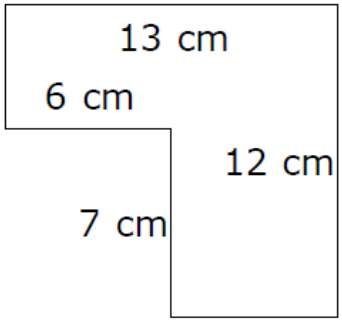
Math 3 Homework 23
Part I

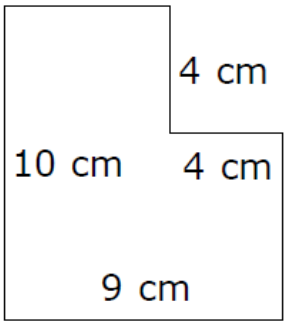
1 Calculate.

4 m 2 dm 6 cm + 1 m 5 dm 2 cm = __ m ___ dm ___ cm

9 m 8 dm 3 cm – 6 m 2 dm 1 cm = ___ m ___dm ____ cm

2 Find the perimeter and the area of the following shapes. Try to use the most optimal way to calculate. Show your work.



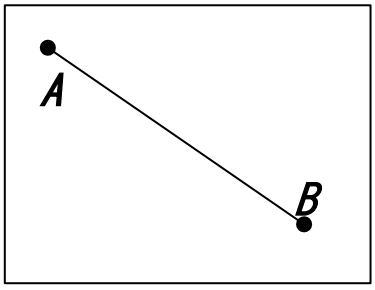


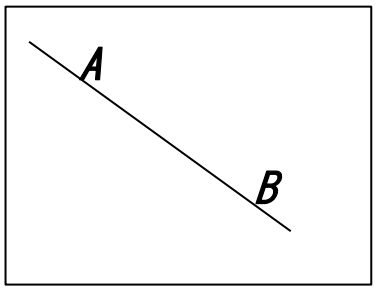
Perimeter = _____ Perimeter = _____

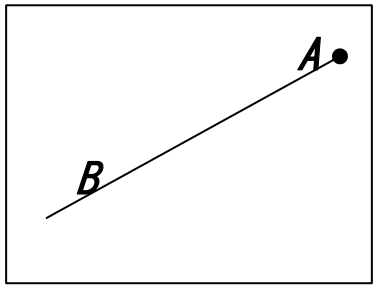
Area = _____ Area = _____

3 Connect the names with the appropriate drawings.

Straight line $\overleftrightarrow{AB}$	Segment $\overline{AB}$	Ray $\overrightarrow{AB}$







4

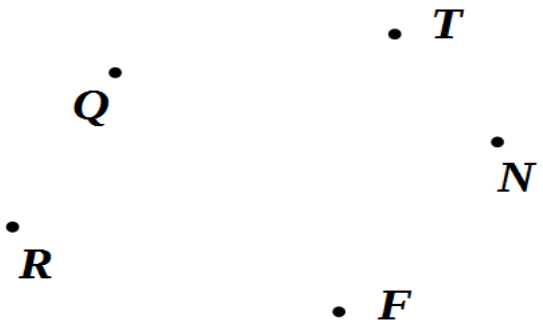
Use a ruler.

a) Plot straight line $\overleftrightarrow{NQ}$

b) Plot ray $\overrightarrow{RT}$

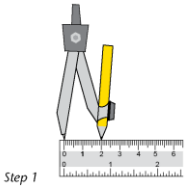
c) Label the intersection **M**.

d) Plot segment $\overline{MF}$.



5

Use a rules and a compass. Draw a line segment $\overline{AB}$, place a point C on the segment between points A and B. Write down the name of each line segment you get. Place another point D and D' on the same distance from point C (use a compass to put points D and D' on the same distance from point C - any distance of your choice). Point D should be between points A and C, point D' should be between points C and B. between Name all line segments you get.



A B

6

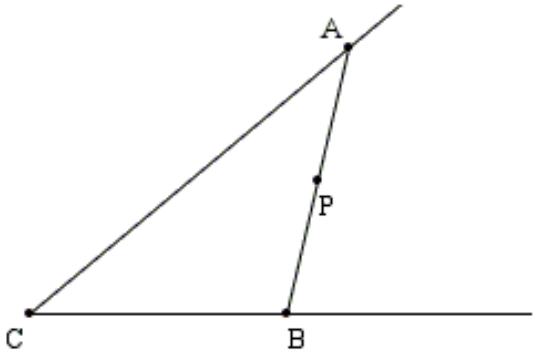
a) Draw a line segment $\overline{AB}$.
Draw another line segment $\overline{CD}$ in a way that the intersection between $\overline{AB}$ and $\overline{CD}$ is a point K.

b) Draw a line segment $\overline{AB}$ again below. Draw another line segment $\overline{EF}$ in a way that the intersection between $\overline{AB}$ and $\overline{EF}$ is a line segment $\overline{EB}$.

7

Interior and Exterior of an Angle.

Does point P belong to an $\angle ACB$? _____ Does a segment $\overline{AB}$ belong to an $\angle ACB$? _____

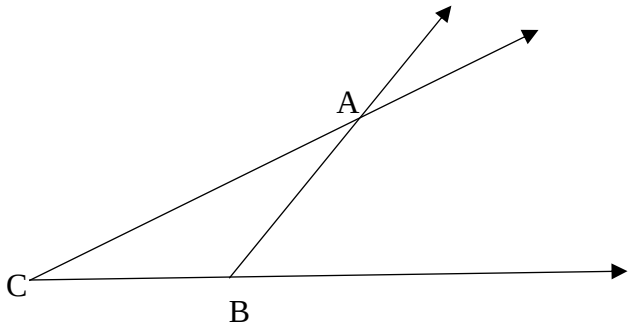


8.

Do all points of a ray $\overrightarrow{BA}$ belong to the $\angle ACB$? _____

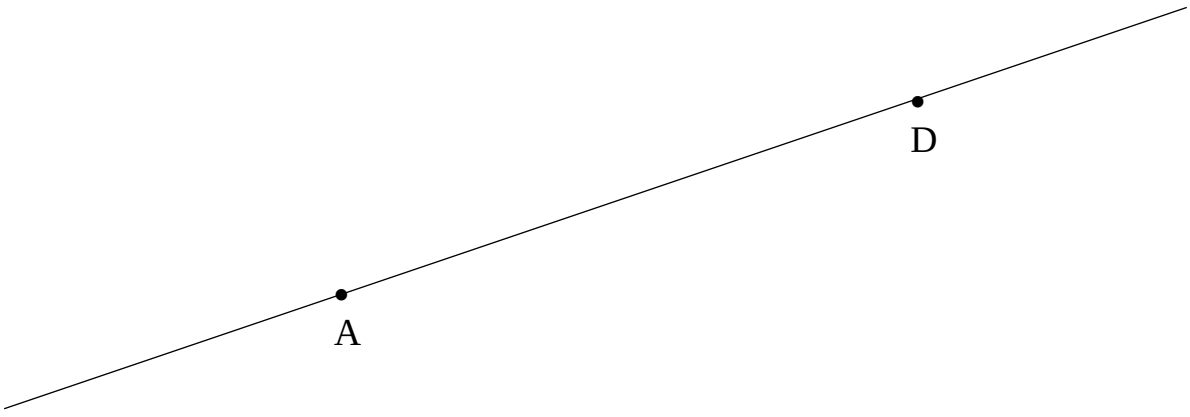
a) Take a blue pencil and follow the part of the ray $\overrightarrow{BA}$ which is inside the angle $\angle ACB$

b)Take a green pencil and follow the part of the ray $\overrightarrow{BA}$ which is outside the angle $\angle ACB$



9.

Use a compass and the ruler to find a midpoint between points A and D.



10 Practice to draw concentric circles. Place a center **A** in the middle of the page. Using a compass, draw 3 circles – with a radius 7 cm, 5 cm and 3 cm. Name each circle. What is the diameter of each circle?

11

a) Use a compass to draw a circle centered at a given point **A** and passing through another point **B** (choose your own compass opening).

b) Use a straightedge and connect the point **B** on the circle to the center **A** to make a radius ***r***.

c) Mark another point **C** at any place between points **A and B.** Using a compass draw a circle with a radius $\overline{\boldsymbol{AC}}$**.**

d) Mark one more point **D** at any place between points **A and C.** Using a compass draw a circle with a radius $\overline{\boldsymbol{AD}}$**.**

- **A**

12 $The \angle ACB$ is 43^0. How big (in degrees) will be a complementary angle? How big (in degrees) will be a supplementary angle?

Complementary angle = _____ supplementary angle = _____

13 The square with a side equal to 1m cut down on the smaller squares with a side of 1 cm. Then all small squares are put along the straight line one by one. The line will have a width equals to 1cm. How long is the line going to be?