

# L'essentiel de la géométrie

## Notations

|                                              |       |  |
|----------------------------------------------|-------|--|
| <b>Droite</b> passant par les points A et B  | ..... |  |
| <b>Demi-droite</b> d'origine A passant par B | ..... |  |
| <b>Segment</b> d'extrémités A et B           | ..... |  |
| <b>Longueur</b> du segment [AB]              | ..... |  |
| <b>Angle</b> de sommet B                     | ..... |  |

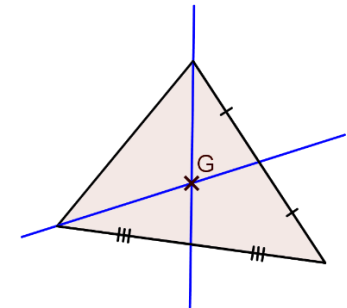
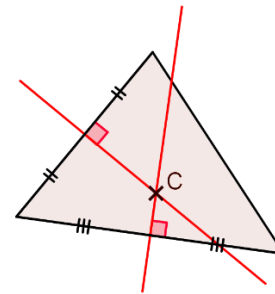
## Symboles

|                       |       |
|-----------------------|-------|
| $A \in (d)$           | ..... |
| $B \notin (\Delta)$   | ..... |
| $(D) \perp (D')$      | ..... |
| $(EF) \parallel (GH)$ | ..... |

## Droites remarquables dans le triangle

|             | Sommet | Milieu du segment opposé | Perpendiculaire au segment opposé | Angle en deux parties égales |
|-------------|--------|--------------------------|-----------------------------------|------------------------------|
| Hauteur     |        |                          |                                   |                              |
| Médiane     |        |                          |                                   |                              |
| Médiatrice  |        |                          |                                   |                              |
| Bissectrice |        |                          |                                   |                              |

## Exemples :



.....

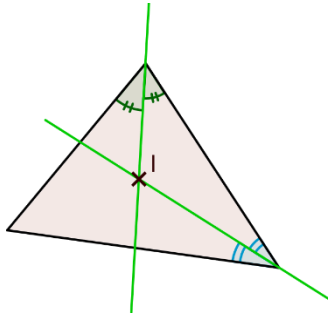
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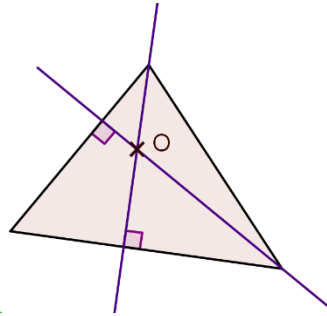
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### Triangle rectangle et cercle

Propriété 1 : Si un triangle est rectangle alors il est .....

.....

.....

Propriété 2 : Si un triangle est rectangle alors la longueur de .....

.....

.....

Exemple :

On sait que .....

et que .....

Alors .....

.....

.....

### Théorème de Pythagore

.....

.....

### Cosinus d'un angle aigu

.....

.....

### Propriété de Thalès

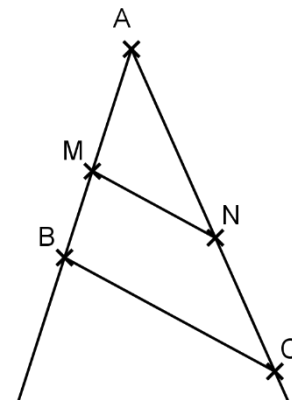
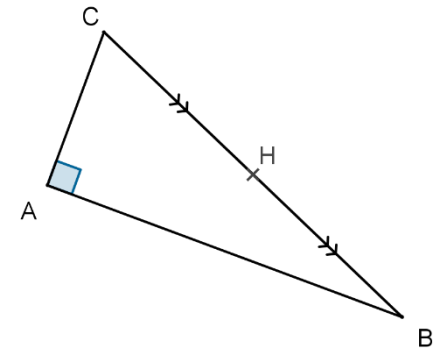
On sait que : - .....

- .....

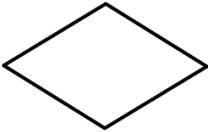
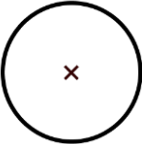
- .....

Alors .....

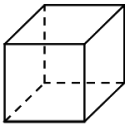
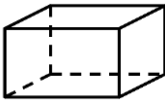
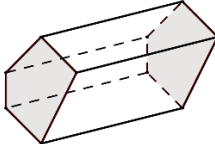
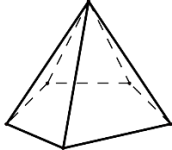
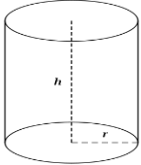
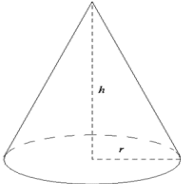
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## Figures planes

| Nature | Figure                                                                              | Périmètre | Aire  |
|--------|-------------------------------------------------------------------------------------|-----------|-------|
| .....  |    | .....     | ..... |
| .....  |    | .....     | ..... |
| .....  |    | .....     | ..... |
| .....  |    | .....     | ..... |
| .....  |  | .....     | ..... |
| .....  |  | .....     | ..... |

## Solides

| Nature | Solide                                                                                | Aire latérale | Volume |
|--------|---------------------------------------------------------------------------------------|---------------|--------|
| .....  |    | .....         | .....  |
| .....  |    | .....         | .....  |
| .....  |    | .....         | .....  |
| .....  |    | .....         | .....  |
| .....  |  | .....         | .....  |
| .....  |  | .....         | .....  |