

## Chapitre 8 : Les triangles- Exercices

**Pour les exercices 1 à 12 :** (Calculer) Les triangles  $ABC$  suivants peuvent-ils être tracés ?

**Exercice 1 :**

- $AB = 5$  cm
- $AC = 4$  cm
- $BC = 12$  cm

**Exercice 2 :**

- $AB = 3$  cm
- $AC = 2$  cm
- $BC = 8$  cm

**Exercice 3 :**

- $AB = 2$  cm
- $AC = 5$  cm
- $BC = 4$  cm

**Exercice 4 :**

- $AB = 3$  cm
- $AC = 2$  cm
- $BC = 8$  cm

**Exercice 5 :**

- $AB = 3$  cm
- $AC = 5$  cm
- $BC = 7$  cm

**Exercice 6 :**

- $AB = 2$  cm
- $AC = 5$  cm
- $BC = 9$  cm

**Exercice 7 :**

- $AB = 2$  cm
- $AC = 3$  cm
- $BC = 8$  cm

**Exercice 8 :**

- $AB = 5$  cm
- $AC = 2$  cm
- $BC = 5$  cm

**Exercice 9 :**

- $AB = 2$  cm
- $AC = 4$  cm
- $BC = 4$  cm

**Exercice 10 :**

- $AB = 4$  cm
- $AC = 2$  cm
- $BC = 7$  cm

**Exercice 11 :**

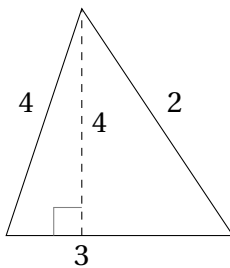
- $AB = 4$  cm
- $AC = 3$  cm
- $BC = 10$  cm

**Exercice 12 :**

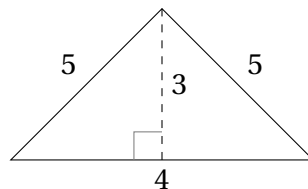
- $AB = 3$  cm
- $AC = 3$  cm
- $BC = 5$  cm

**Pour les exercices 13 à 18 :** Calculer les aires des triangles suivants

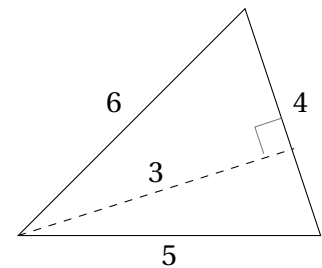
**Exercice 13 :**



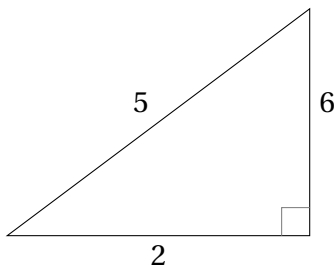
**Exercice 14 :**



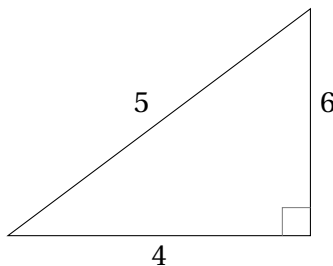
**Exercice 15 :**



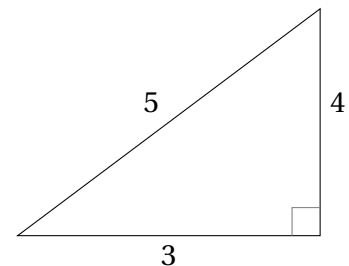
**Exercice 16 :**



**Exercice 17 :**

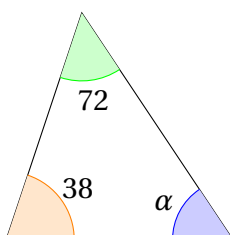


**Exercice 18 :**

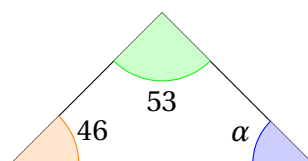


**Pour les exercices 19 à 27 :** Trouver la mesure de l'angle  $\alpha$

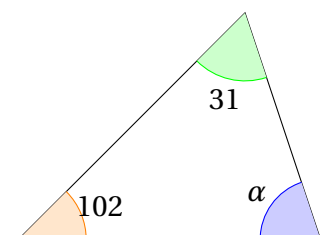
**Exercice 19 :**

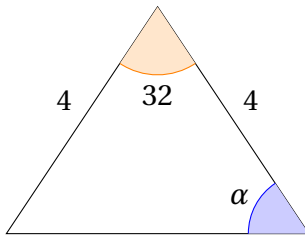
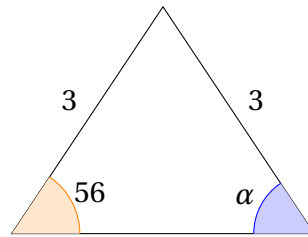
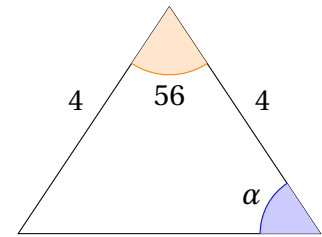
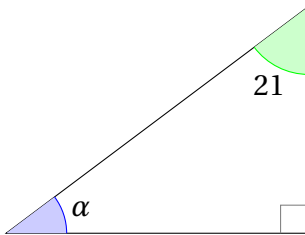
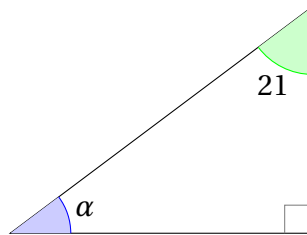
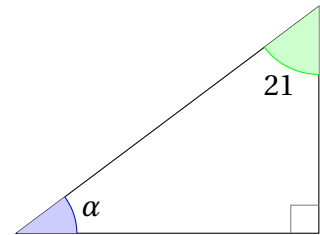


**Exercice 20 :**



**Exercice 21 :**



**Exercice 22 :****Exercice 23 :****Exercice 24 :****Exercice 25 :****Exercice 26 :****Exercice 27 :**

**Pour les exercices 28 à 35 :** (Modéliser) Sans les tracer, dire si les triangles  $ABC$  suivants sont quelconques, rectangles, isocèles ou équilatéraux.

**Exercice 28 :**

- $AB = 5$  cm
- $AC = 5$  cm
- $\widehat{ABC} = 79^\circ$

**Exercice 30 :**

- $AB = 2$  cm
- $\widehat{BAC} = 39^\circ$
- $\widehat{BAC} = 39^\circ$

**Exercice 32 :**

- $AB = 3$  cm
- $AC = 3$  cm
- $BC = 3$  cm

**Exercice 34 :**

- $AB = 4$  cm
- $\widehat{BAC} = 65^\circ$
- $\widehat{ACB} = 15^\circ$

**Exercice 29 :**

- $AB = 5$  cm
- $AC = 2$  cm
- $\widehat{ACB} = 52^\circ$

**Exercice 31 :**

- $AB = 5$  cm
- $AC = 5$  cm
- $\widehat{ABC} = 60^\circ$

**Exercice 33 :**

- $AB = 4$  cm
- $\widehat{BAC} = 21^\circ$
- $\widehat{ABC} = 69^\circ$

**Exercice 35 :**

- $AB = 3$  cm
- $AC = 4$  cm
- $BC = 5$  cm

**Pour les exercices 36 à 43 :** (Représenter) Tracer les triangles  $ABC$  suivants

**Exercice 36 :**

- $AB = 5$  cm
- $AC = 5$  cm
- $\widehat{ABC} = 79^\circ$

**Exercice 38 :**

- $AB = 2$  cm
- $AC = 5$  cm
- $\widehat{BAC} = 39^\circ$

**Exercice 40 :**

- $AB = 3$  cm
- $\widehat{BAC} = 56^\circ$
- $\widehat{ABC} = 84^\circ$

**Exercice 42 :**

- $AB = 4$  cm
- $\widehat{BAC} = 85^\circ$
- $\widehat{ACB} = 69^\circ$

**Exercice 37 :**

- $AB = 5$  cm
- $AC = 2$  cm
- $\widehat{ACB} = 52^\circ$

**Exercice 39 :**

- $AB = 5$  cm
- $AC = 5$  cm
- $\widehat{ABC} = 47^\circ$

**Exercice 41 :**

- $AB = 4$  cm
- $\widehat{BAC} = 21^\circ$
- $\widehat{ABC} = 117^\circ$

**Exercice 43 :**

- $AB = 4$  cm
- $\widehat{BAC} = 92^\circ$
- $\widehat{ACB} = 51^\circ$

**Pour les exercices 44 à 51 :** (Représenter) Tracer les triangles  $ABC$  suivants

**Exercice 44 :**

- $AB = 2$  cm
- $AC = 2$  cm
- $BC = 1$  cm

**Exercice 46 :**

- $AB = 3$  cm
- $AC = 4$  cm
- $BC = 5$  cm

**Exercice 48 :**

- $AB = 4$  cm
- $AC = 2$  cm
- $BC = 4$  cm

**Exercice 50 :**

- $AB = 2$  cm
- $AC = 4$  cm
- $BC = 3$  cm

**Exercice 45 :**

- $AB = 3$  cm
- $AC = 2$  cm
- $BC = 3$  cm

**Exercice 47 :**

- $AB = 2$  cm
- $AC = 3$  cm
- $BC = 4$  cm

**Exercice 49 :**

- $AB = 4$  cm
- $AC = 2$  cm
- $BC = 3$  cm

**Exercice 51 :**

- $AB = 4$  cm
- $AC = 2$  cm
- $BC = 7$  cm