

The Different Types of Angles & The Different Types of Triangles

Ⓐ THE DIFFERENT TYPES OF ANGLES

1) An acute angle is less than 90° as shown in Fig.1.

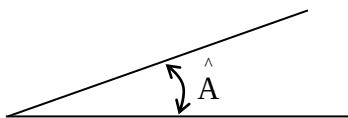


Fig.1 Acute angle $\hat{A} < 90^\circ$

2) An obtuse angle lies between 90° and 180° . See Fig.2.

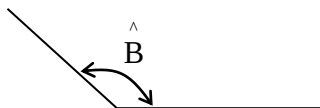


Fig.2 Obtuse angle $90^\circ < \hat{B} < 180^\circ$

3) A reflex angle is greater than 180° . See Fig.3.

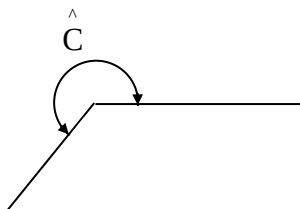


Fig.3 Reflex angle $\hat{C} > 180^\circ$

4) A right angle is equal to 90° . See Fig.4.

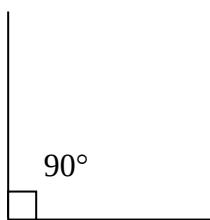


Fig.4 Right angle = 90°

5) **Complementary angles** are angles whose sum is 90° as shown in Fig.5.

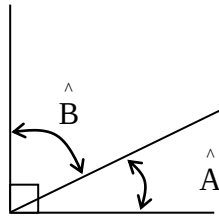


Fig.5 $\hat{A}$ and $\hat{B}$ are complementary angles: $\hat{A} + \hat{B} = 90^\circ$

5) **Supplementary angles** are angles whose sum is 180° . See in Fig.6.

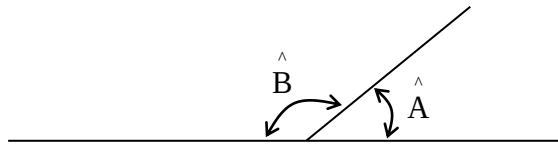


Fig.6 $\hat{A}$ and $\hat{B}$ are supplementary angles: $\hat{A} + \hat{B} = 180^\circ$

(B) THE DIFFERENT TYPES OF TRIANGLES

1) An acute-angled triangle has all its angle less than 90° as shown in Fig.7.

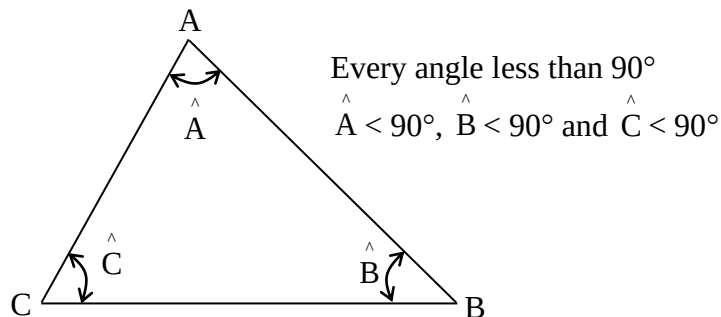


Fig.7 Acute-angled triangle

2) An obtuse-angled triangle has one angle greater than 90° as shown in Fig.8.

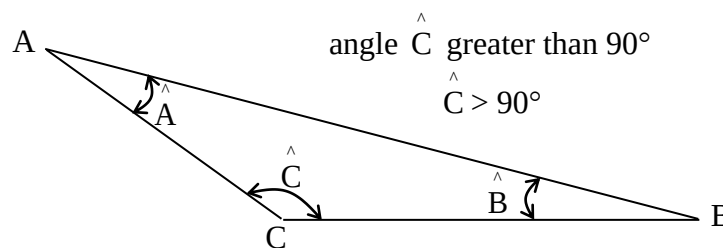


Fig.8 Obtuse-angled triangle

3) A right-angled triangle has one of its angles equal to 90° . The side opposite to the right-angle is the longest side and it is called the hypotenuse as shown in Fig.9.

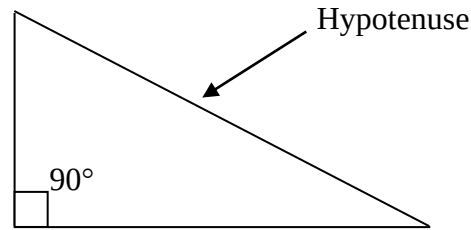


Fig.9 Right-angled triangle

4) An **isosceles triangle** has two sides and two angles equal. The equal angles lie opposite to the equal sides. See Fig.10.

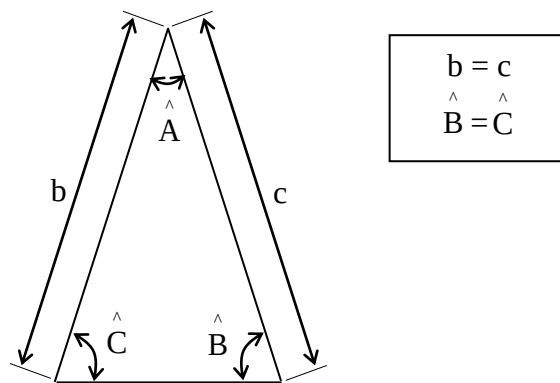


Fig.10 Isosceles triangle

5) An **equilateral triangle** has all its sides and angles equal. Each angle of the triangle is 60° . See Fig.11.

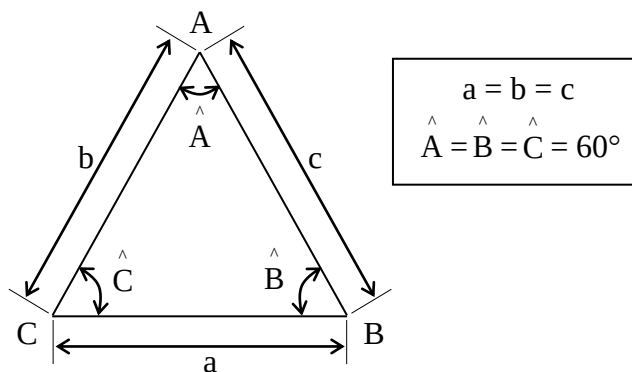


Fig.11 Equilateral triangle

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