Lines And Angles

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Lines and angles

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- Basic Terms And Definitions
- Points
- Intersecting Lines And Non Intersecting Lines
- Perpendicular Lines
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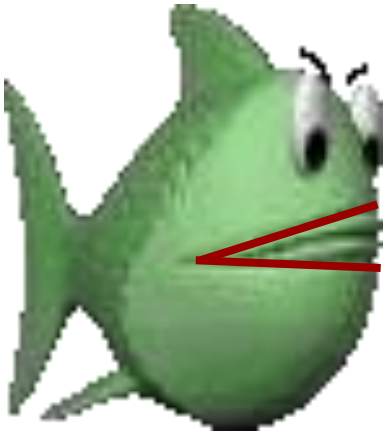
- Parallel Lines And ATransversal

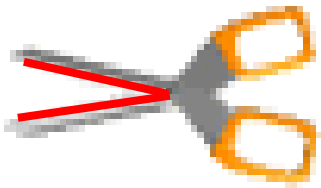
Introduction

- In math geometry the lines and angles are important tools. If any object in ideal, that is called as line and it is represented as straight curve.
- The angle is related with line that is the cross-section of two-line is create the angle and that intersection point is called as vertex. Here we see about types of line and angle in math.

Angles in daily life

If we look around us, we will see angles everywhere.





Basic Terms And Definition

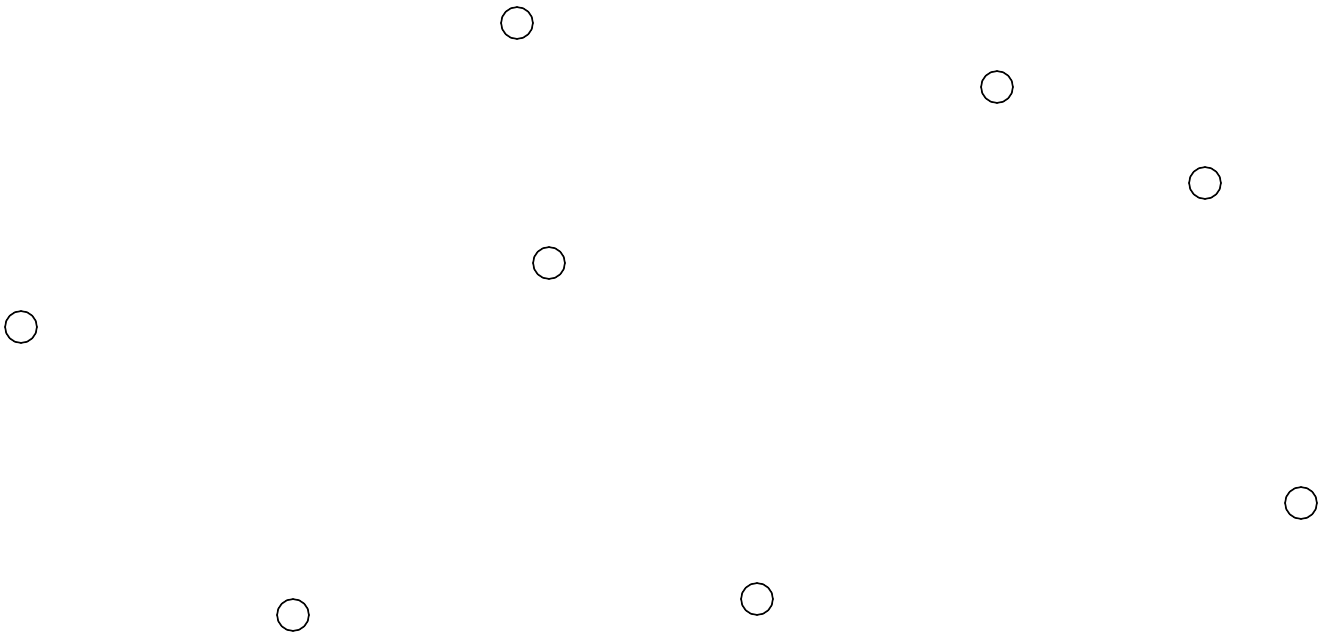
- LINE: A straight path extending in both directions with no endpoints

- LINE SEGMENT: A part of a line that includes two points, called endpoints, and all the points between them

- RAY: A part of a line, with one endpoint, that continues without end in one direction

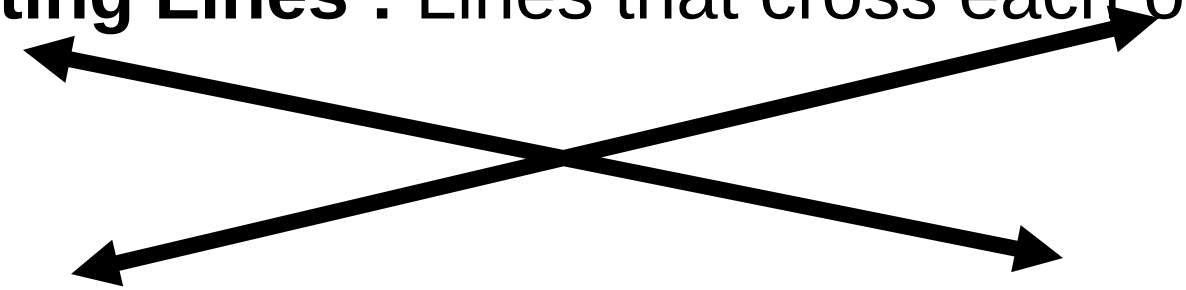
POINTS

An Exact Point Or Location

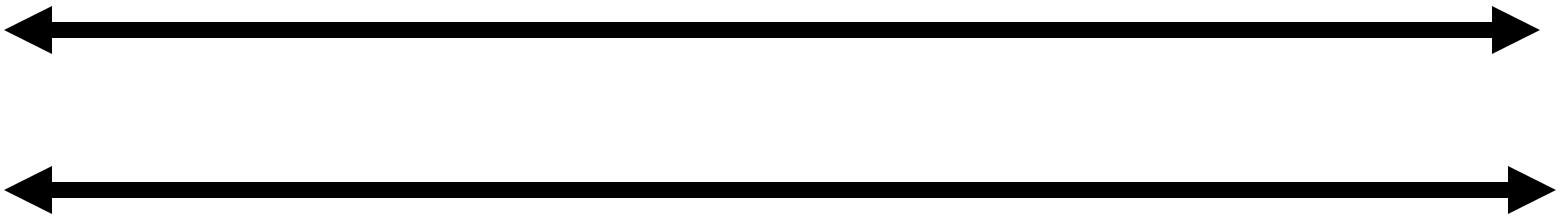


Intersecting Lines And Non Intersecting Lines

Intersecting Lines : Lines that cross each other.



Non Intersecting lines : Lines that never cross and are always the same distance apart. They are also called parallel lines.



Examples Of Non Intersecting Lines

- Hardwood Floor
- Opposite sides of windows, desks, etc.
- Parking slots in parking lot
- Parallel Parking

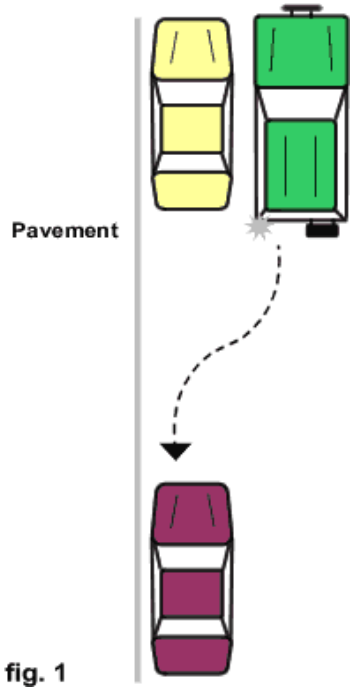
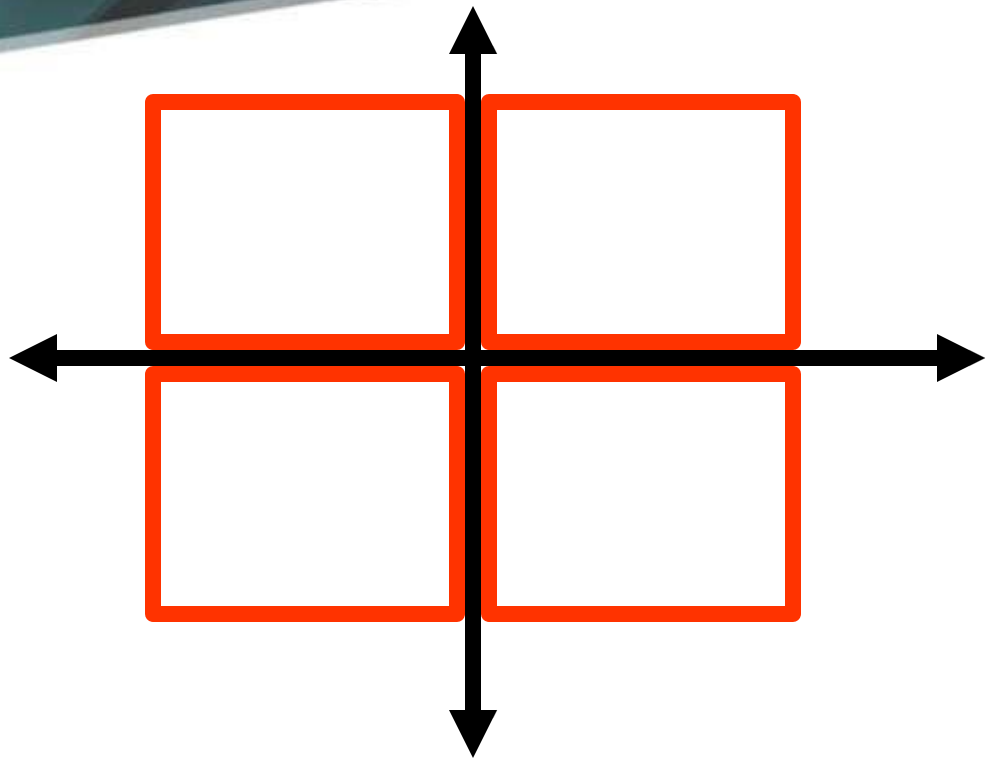


fig. 1

Perpendicular lines



Two lines that intersect to form four right angles

Examples Of Perpendicular Lines

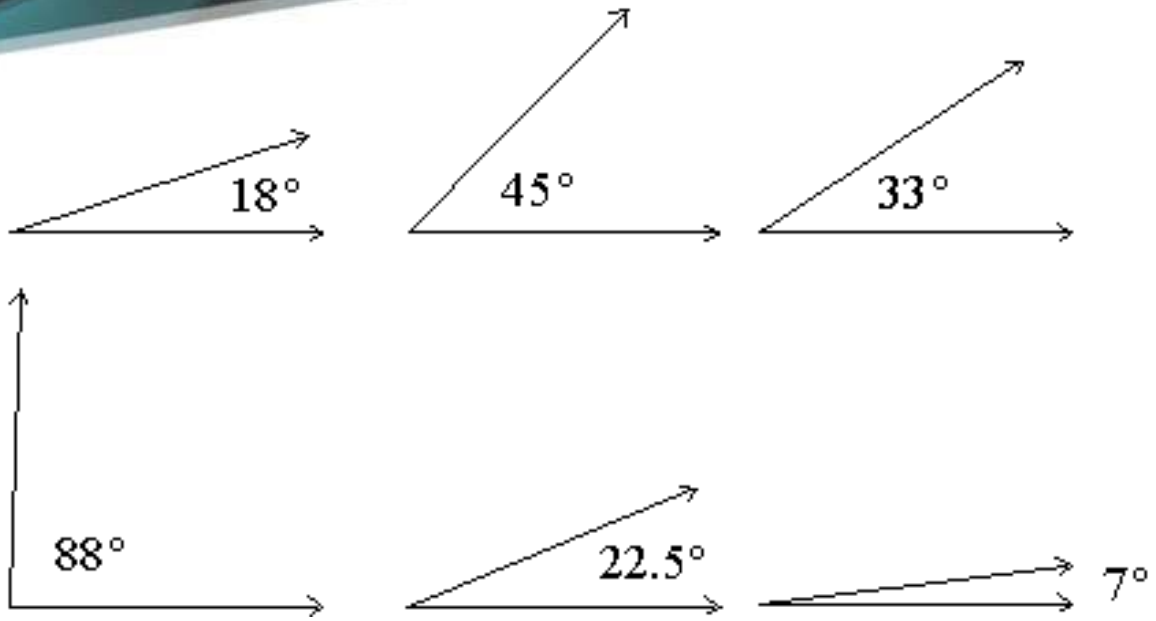
- **Window Panes**
- **Streets Of Cities**

Angles

In geometry, an angle is the figure formed by two rays sharing a common endpoint, called the vertex of the angle. The magnitude of the angle is the "amount of rotation" that separates the two rays, and can be measured by considering the length of circular arc swept out when one ray is rotated about the vertex to coincide with the other.

- Acute Angle
- Right Angle
- Obtuse Angle
- Straight angle
- Reflex Angle
- Adjacent Angles
- Linear Pair Of Angles
- Vertically Opposite Angles

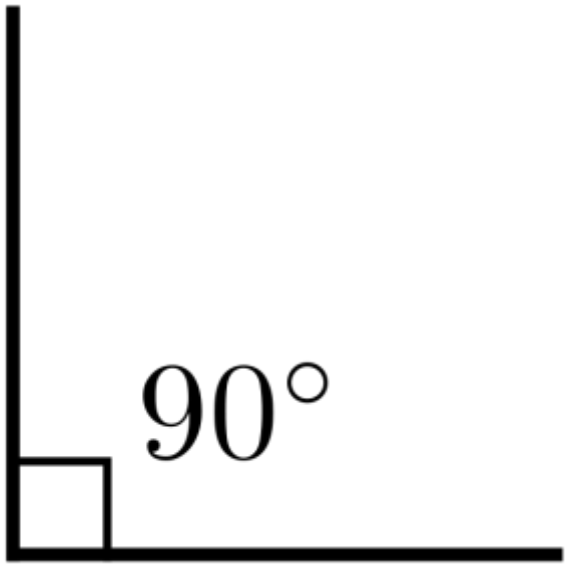
Acute Angles



The measure of an angle with a measure between 0° and 90°.

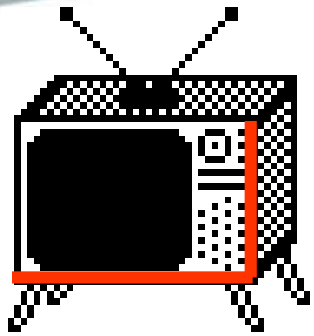
Examples Of Acute Angles

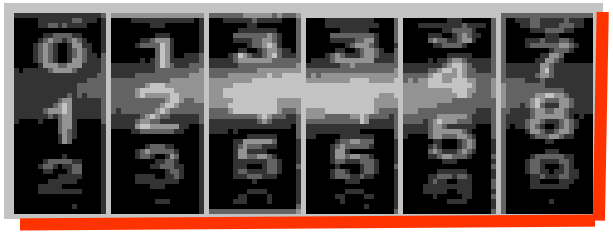
Right angle

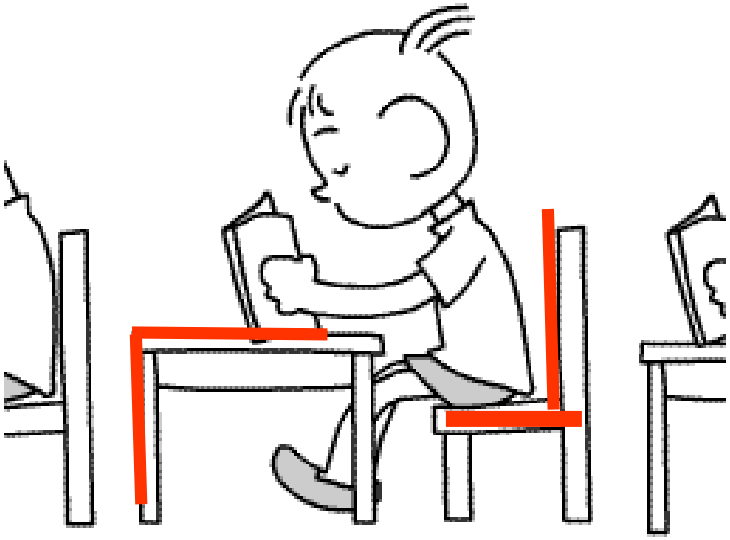


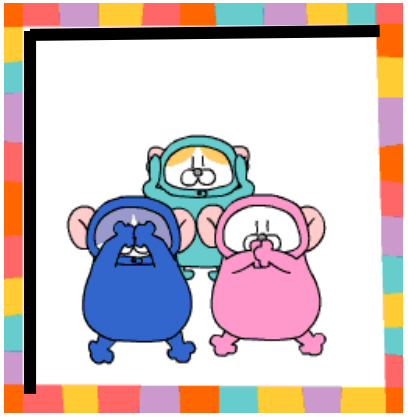
An angle formed by the perpendicular intersection of two straight lines; an angle of 90°.

Examples Of Right Angle

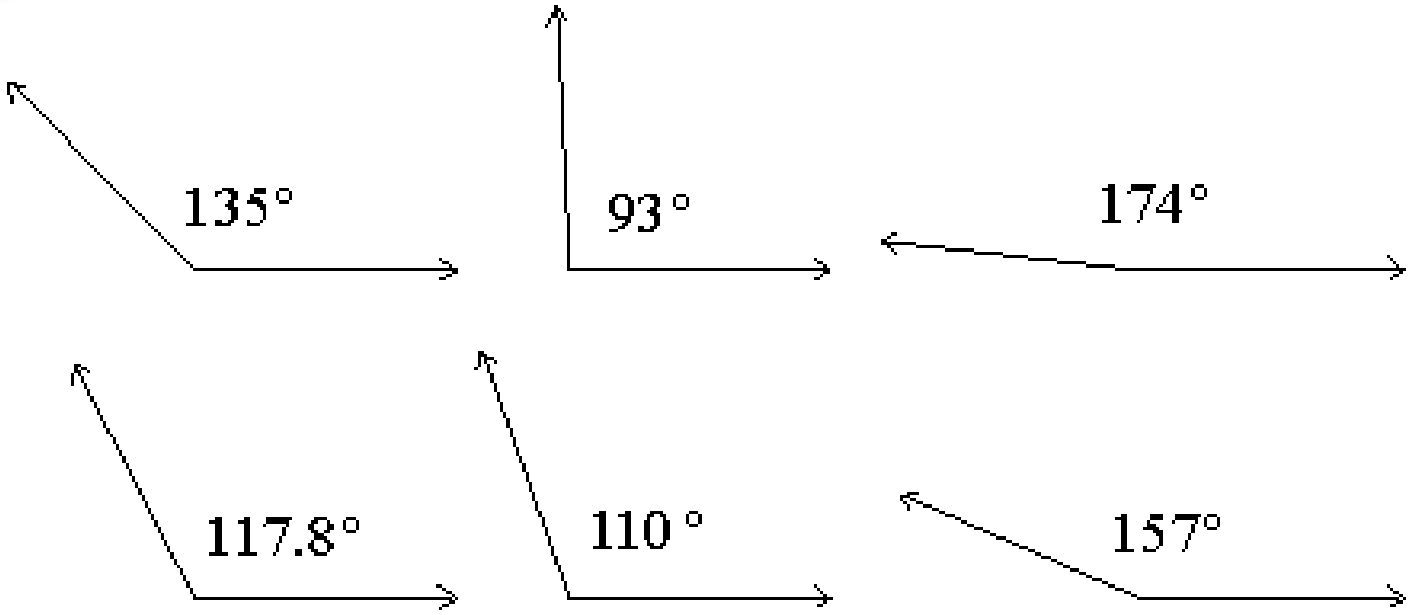






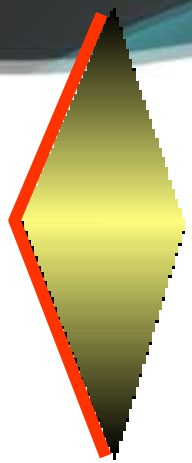


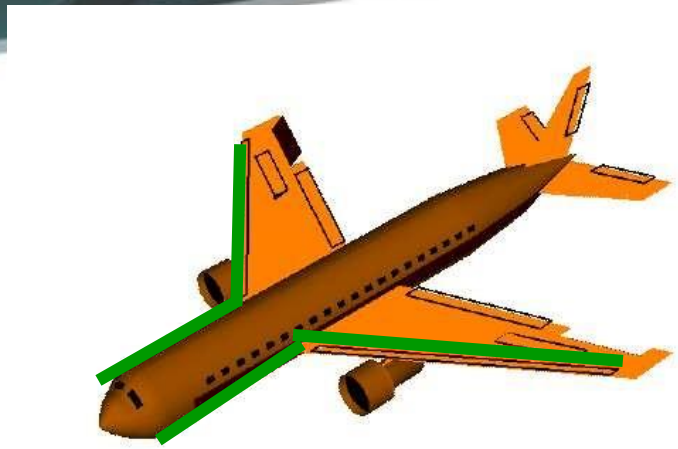
Obtuse Angle

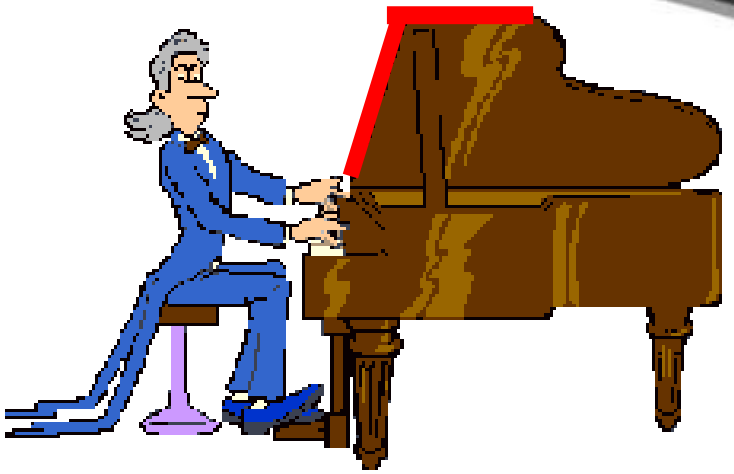


Angle measures greater than 90 degrees but less than 180 degrees.

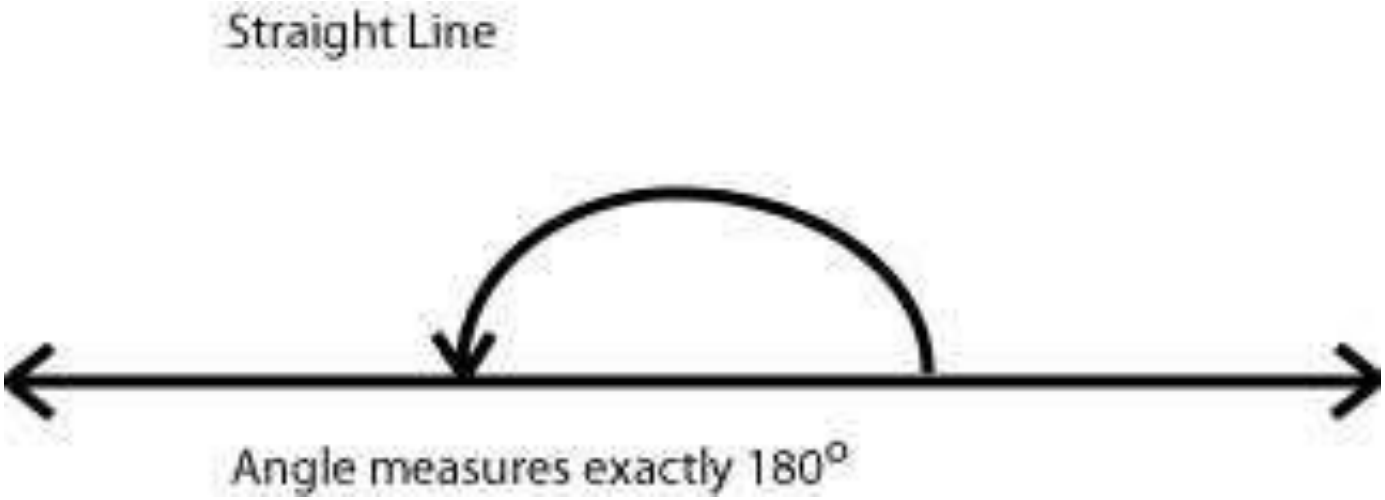
Examples Of Obtuse Angle





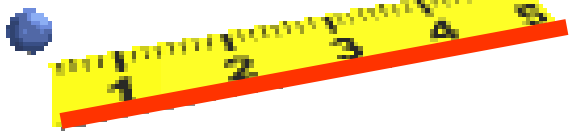


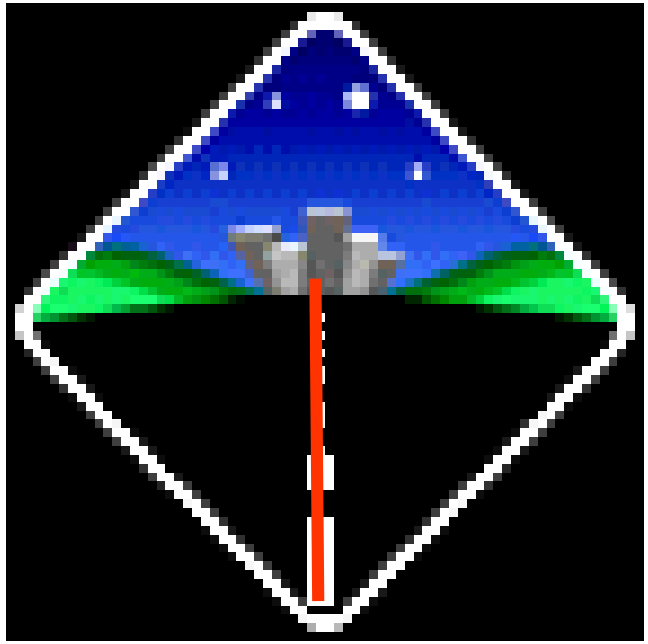
Straight Angle



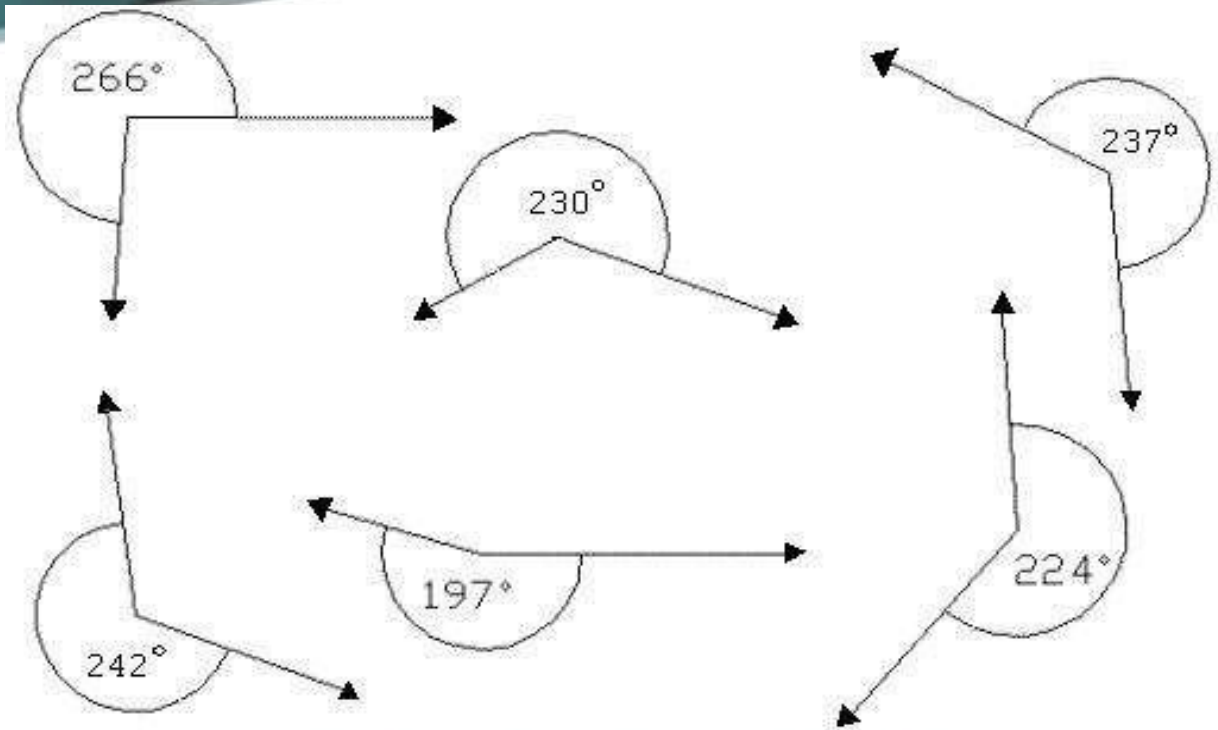
A straight angle changes the direction to point the opposite way. It looks like a straight line. It measures 180° (half a revolution, or two right angles)

Examples Of Straight Angle



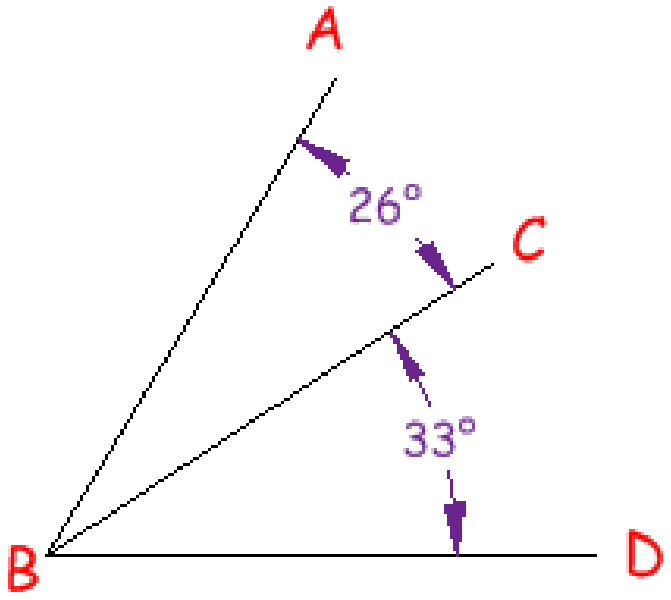


Reflex Angle



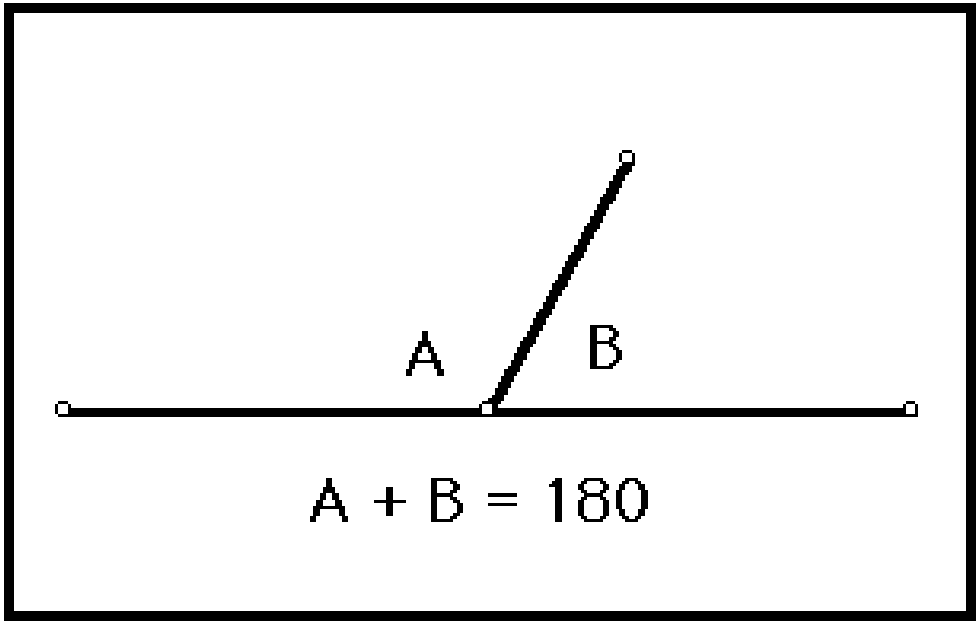
A Reflex Angle is more than 180° but less than 360°

Adjacent Angles



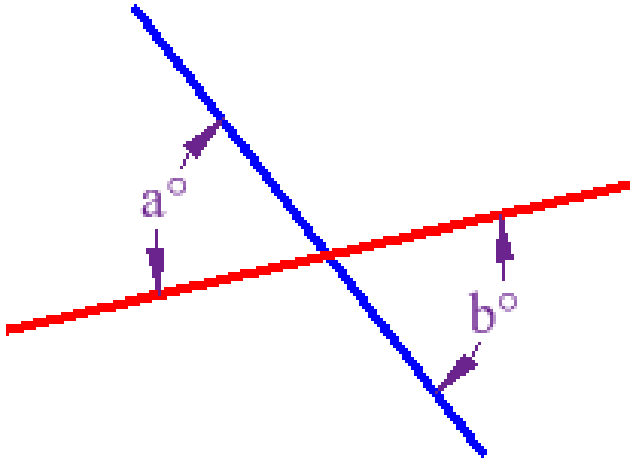
In geometry, adjacent angles, often shortened as adj. ∠s, are angles that have a common ray coming out of the vertex going between two other rays. In other words, they are angles that are side by side, or adjacent.

Linear Pair Of Angles



A pair of adjacent angles formed by intersecting lines.
Linear pairs of angles are supplementary.

Vertically opposite Angle



In geometry, a pair of angles is said to be vertical (also opposite and vertically opposite, which is abbreviated as vert. opp. ∠s) if the angles are formed from two intersecting lines and the angles are not adjacent. They all share a vertex. Such angles are equal in measure and can be described as congruent.

Thankyou