THE BARTON SERIES

BARTON LENDS A HELPING HAND

BY

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(Ages 8 and over)

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The evening bell tolled the end of the school day. The usual sounds of departing students echoed across the compounds and Barton had to raise his voice to be heard by Kwame, who stood just a few metres away from him. The talking and laughing among students, the packing of their school bags, the calling out to friends, and the rejoicing at the end of a hard day of study, were among the contributing factors to the noise level.

Kwame and Barton headed towards the school gate to make their exit. Sometimes the two of them would walk a part of their journey home together. Then at a certain point, Kwame would take the left fork on the road and Barton would take the right. Barton and Kwame were close friends and together they spent many hours after school in various activities.

As the two boys exited the school compounds they saw Shanna seated on a bench in front of the school gates. It was not usual to see Shanna awaiting transport, as a driver in a parked car usually awaited her on evenings after school.

“I have to wait for my transport today,” she said to the boys as they approached her. “The driver will be a bit late.”

“We’ll wait with you until your driver arrives,” offered the amicable Kwame.

Both Kwame and Barton sat beside Shanna and all three engaged in lighthearted conversation.

“I almost made an error in today’s mathematics class,” confessed Shanna. “I often get confused with the definitions of complementary and supplementary angles,” said Shanna. “I sometimes mix up the definitions that complementary angles are two angles that total 90^0 and that supplementary angles are two angles that total 180^0.”

“Revise more,” muttered Kwame, who was a brilliant student and loved to poke fun at Shanna. The girl ignored her friend’s little teasing remark at first and then poked him. Kwame pretended to be in great pain and both Barton and Shanna laughed at his antics.

“I realised that the word ‘**SUPPLEMENTARY’** starts with the letter ‘**S’** and also ‘**S’** is the starting letter in ‘**STRAIGHT LINE.’** Since the angle in a straight line is 180^0, I used this to remember that supplementary angles are two angles that total 180^0.”

“Write it on a slip of paper and stick it in front of your study desk. Being in a strategic location you see will see it often enough and this will help you remember it quite easily,” said Kwame, sounding quite serious.

Barton and Shanna slowly looked at each other, as Kwame pulled out a candy bar from his pocket and began to munch on it.

“I wonder if we are thinking along the same lines,” Shanna said to Barton.

“A mathematics dictionary, with definitions, clearly written and placed on the classroom wall,” replied Barton.

“Indeed,” responded the girl.

Kwame smiled, but it had nothing to do with the thoughts of Barton and Shanna. He continued to munch happily on the candy, which he moved from side to side in his mouth and for a moment Kwame’s world stood still. The taste of sticky comestibles had this effect on Kwame.

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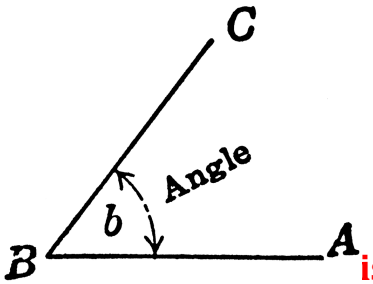
It was shortly after that evening when members of the class got together and under the guidance of Miss began to compile a chart of mathematical definitions. The students were all invited to contribute to the group’s activity in any form. Some of them began to carefully write the definitions on paper charts. These they placed on the classroom walls and all within an easy viewing range.

“We will see the various terms, definitions and even examples often and they shall help us to remember them a lot better,” Miss reassured the class.

The charts were positioned on the walls of the classroom for easy reading and viewing. Some students from other classes invited themselves and with their teachers were admiring the handiwork of the students from Miss’ class.

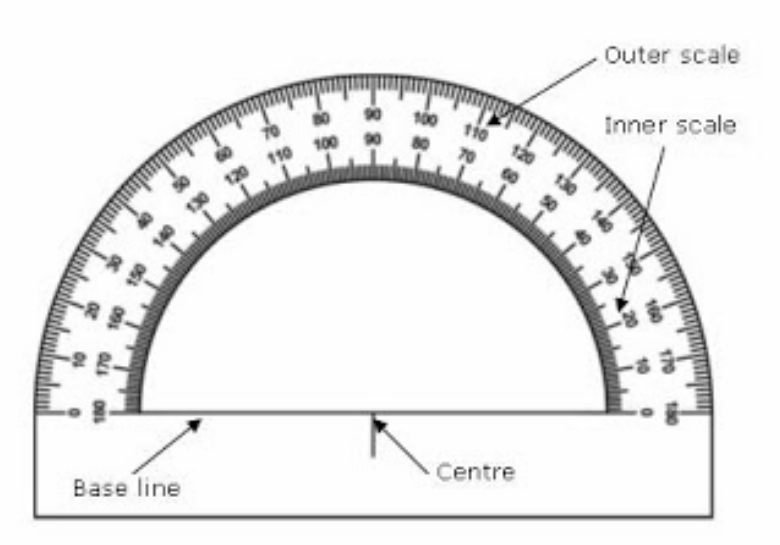
Barton and Shanna gazed at the wall as they read:

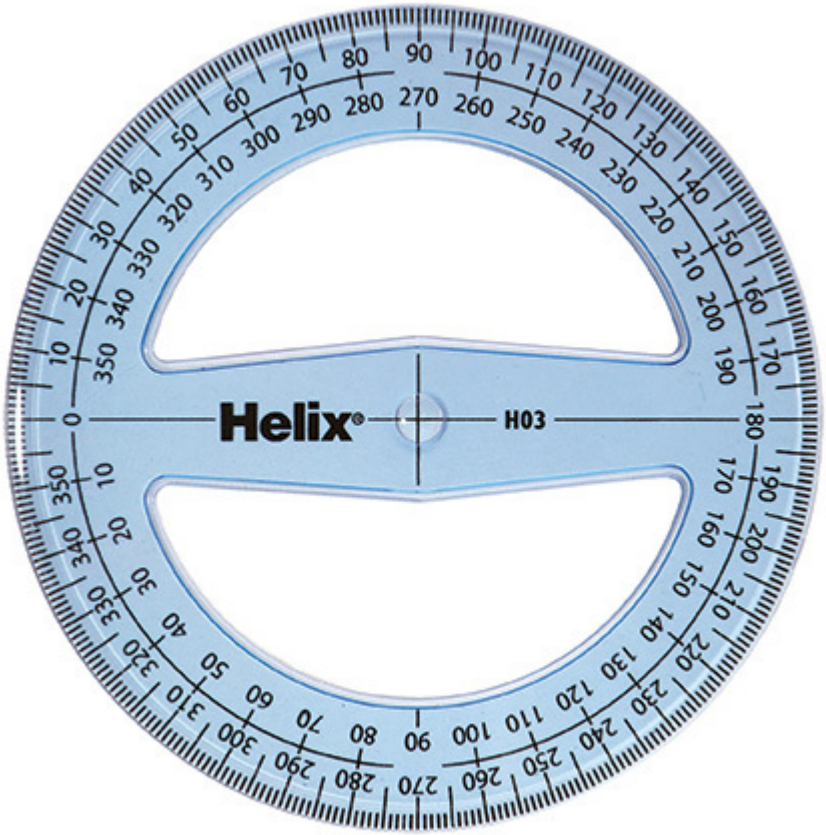
When two straight lines meet at a point, an ANGLE

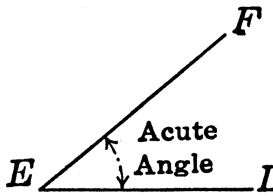


is formed. The point at which they meet is called the vertex and the two lines are referred to as the arms of the angle. Angles

are measured with a protractor, and the unit of measurement is in degrees. A complete circle or one revolution is a measure of 360^0.

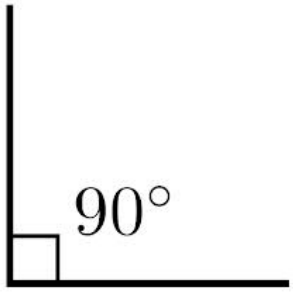




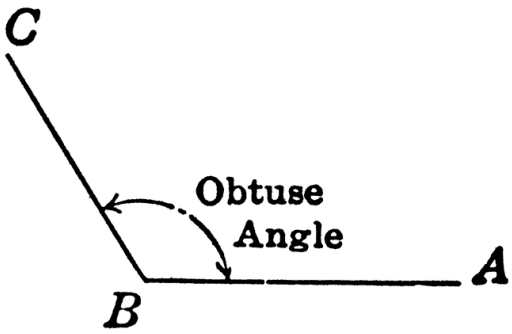


An angle that measures less than 90^0 is called acute.

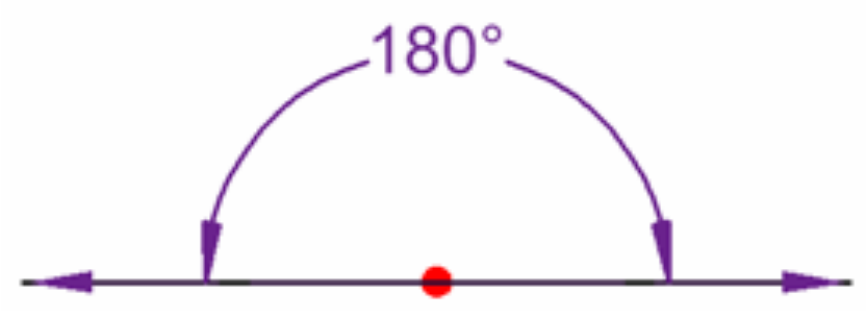
An angle that measures exactly 90^0 is called right.



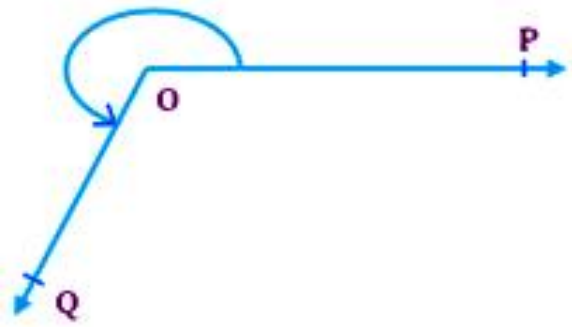
An angle that measures between 90^0 and 180^0 is called obtuse.



An angle that measures 180^0 is called a straight angle.



An angle that measures between 180^0 and 360^0 is called reflex.



“I think that the example of angle has been wonderfully done,” remarked Barton.

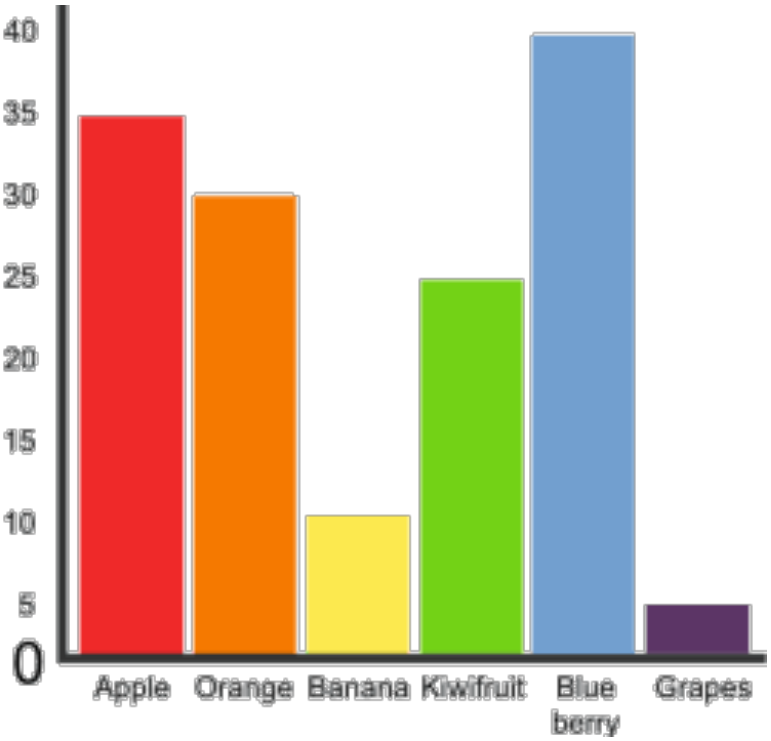
“It is,” agreed Shanna. “Let’s look at some more of the charts. There are some letters with more than one definition and examples.”

“This is most interesting and informative,” said Barton as he looked at:

Data is represented in many different ways and one of them is on a **BAR CHART or BAR GRAPH.**

A bar chart is a graphical display of data using rectangular bars whose lengths (or heights) indicate the values that they represent.

The following example of a bar chart shows the favourite fruit of 145 people, conducted in a survey.



The width of each bar is the same and the space between successive bars is also the same. Both are chosen by the person drawing the diagram unless specified otherwise. Bar graphs are best drawn on a grid for greater accuracy. As shown in the above diagram, the bars may even be coloured. The item that each bar represents is written under the bar.

“Let’s move on,” urged Shanna.

“Isn’t C marvellous,” she said excitedly.