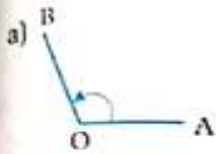


Class: Seven Date:- _____ Name:- _____

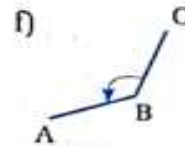
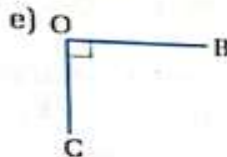
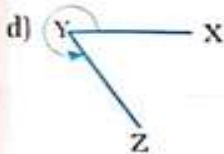
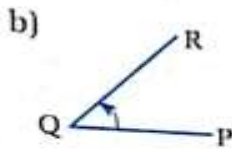
Subject-Mathematics

Source: photo of exercise are given below

Looking back Classwork
 Tell the names and types (acute, right, obtuse, straight or reflex angles) of these angles.



$\angle AOB$ - Obtuse angle



List these angles separately as acute, obtuse, right, straight or reflex angles.

$120^\circ, 55^\circ, 210^\circ, 90^\circ, 70^\circ, 150^\circ, 150^\circ, 180^\circ, 300^\circ, 135^\circ, 85^\circ, 230^\circ$

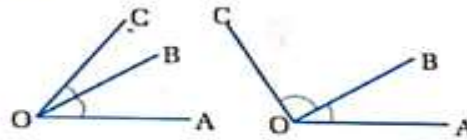
Acute	Obtuse	Right	Straight	Reflex

2.1 Different pairs of angles - review

These are a few special pairs of angles.

i) Adjacent angles

$\angle AOB$ and $\angle BOC$ have common vertex O and a common arm OB. They are called adjacent angles.



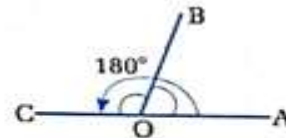
ii) Linear pair

$\angle AOB$ and $\angle BOC$ are a pair of adjacent angles.

Their sum is a straight angle (180°)

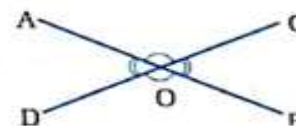
i.e. $\angle AOB + \angle BOC = 180^\circ$

$\angle AOB$ and $\angle BOC$ are called a linear pair.



(iii) Vertically opposite angles

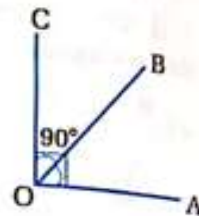
$\angle AOC$ and $\angle BOD$ are formed by intersected line segments and they lie to the opposite side of the common vertex.



They are called vertically opposite angles. $\angle AOD$ and $\angle BOC$ are another pair of vertically opposite angles. Vertically opposite angles are always equal.
 $\therefore \angle AOC = \angle BOD$ and $\angle AOD = \angle BOC$.

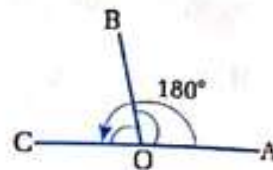
(iv) Complementary angles

The sum of $\angle AOB$ and $\angle BOC$ is a right angle (90°).
 i.e. $\angle AOB + \angle BOC = 90^\circ$
 $\angle AOB$ and $\angle BOC$ are called complementary angles.
 Here, complement of $\angle AOB = 90^\circ - \angle BOC$.
 complement of $\angle BOC = 90^\circ - \angle AOB$



(v) Supplementary angles

The sum of $\angle AOB$ and $\angle BOC$ is two right angles (180°).
 i.e. $\angle AOB + \angle BOC = 180^\circ$.
 $\angle AOB$ and $\angle BOC$ are called supplementary angles.
 Here, supplement of $\angle AOB = 180^\circ - \angle BOC$
 supplement of $\angle BOC = 180^\circ - \angle AOB$.



12.2 Verification of properties of angles

Activity - 1

Verify experimentally that the vertically opposite angles formed due to the intersection of two line segments are equal.

Verification

(i) Draw 3 sets of two line segments AB and CD intersecting at O.

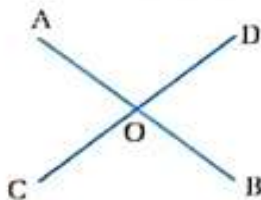


fig (i)

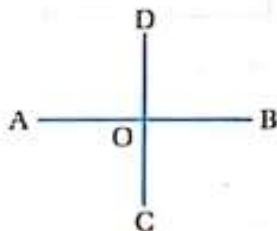


fig (ii)

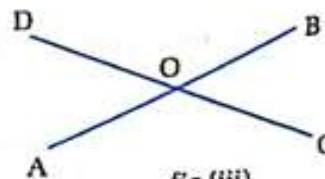


fig (iii)

(ii) Measure each pair of vertically opposite angles: $\angle AOD$ and $\angle BOC$, $\angle AOC$ and $\angle BOD$ with a protractor and write the measurements in the table.

Fig.	Vertically opposite angles			Result
	$\angle AOD$ and $\angle BOC$	$\angle AOC$ and $\angle BOD$		
(i)				$\angle AOD = \angle BOC$ $\angle AOC = \angle BOD$
(ii)				
(iii)				

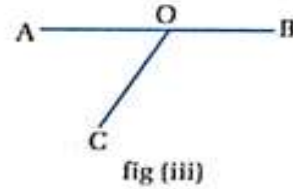
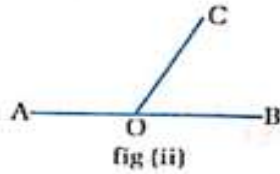
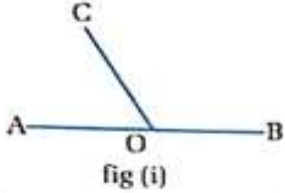
Conclusion: The vertically opposite angles formed due to the intersection of two line segments are equal.

Activity - 2

Experimentally verify that the sum of adjacent angles in linear pair is 180° .

Verification

- i) Draw 3 sets of adjacent angles $\angle AOC$ and $\angle BOC$ in linear pair.



- ii) Measure $\angle AOC$ and $\angle BOC$ with a protractor and write the measurements in the table.

Fig. No.	$\angle AOC$	$\angle BOC$	$\angle AOC + \angle BOC$	Result
(i)				$\angle AOC + \angle BOC = 180^\circ$
(ii)				
(iii)				

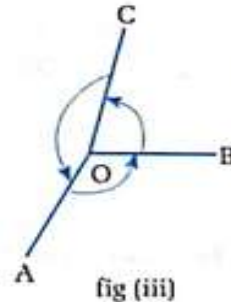
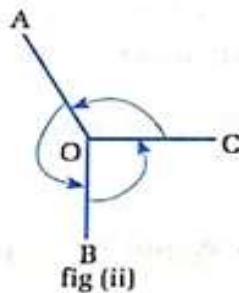
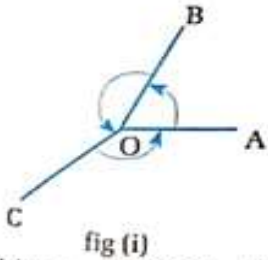
Conclusion: The sum of adjacent angles in linear pair is 180° .

Activity - 3

Verify experimentally that the angle formed by a revolving line in a complete rotation at a point is 360° .

Verification

- i) Draw 3 sets of angles $\angle AOB$, $\angle BOC$ and $\angle COA$ formed by a revolving line OA in a complete rotation at O.



- ii) Measure $\angle AOB$, $\angle BOC$ and $\angle COA$ with a protractor and write the measurements in the table.

Fig. No.	$\angle AOB$	$\angle BOC$	$\angle COA$	$\angle AOB + \angle BOC + \angle COA$	Result
(i)					$\angle AOB + \angle BOC + \angle COA = 360^\circ$
(ii)					
(iii)					

Conclusion: The angle formed by a revolving line in a complete rotation at a point O is 360° .

Work:

- Read & different types of pairs of angles.
- Practice activity 1
- Practice all examples

Do your work neatly

Subject- HPE

- What is skeleton system?
- How many bones are there in human body?
- How many types of bones are there?
- List the parts of our body where long bones are found.

Subject- Social Studies

Lesson –Social Customs

A. Study the following text and answer the following questions:

Magars

Magars are third major caste group in Nepal. Magar occupies 1,887, 733 which is 7.13% of the total population of Nepal. Naming Ceremony is performed in 11th and 15th day of birth of a baby.

Jari Bibaha and Cross-cousin marriage are common in their caste system. They give more priority in marrying a boy with his maternal uncle's daughter. They celebrate Dashain and Tihar. Maghe Sakranti, Naag puja, and Kaura Naach are also famous festivals of them.

Gurungs

Gurung is one of the major indigenous ethnic groups of Nepal. Gurung people live in the western part of Nepal. Mainly Gurung people live in Kaski, Lamjung, Gorkha, Mustang, Tanahun, Dolpa districts. However, they live in each and every part of Nepal, more or less from west to east and Himal to Terai. They follow Buddha religion. Lhochhar is the main festival of Gurung. Dasain and Tihar are also the main festivals of them. They also celebrate Chaite Dasain, Saune Sakranti etc. "*Rhodri*" culture is most famous in Gurung.

The main occupation is still agriculture. Gurung cast is also very famous for Gurkha Soldier and Indian Soldier. The naming ceremony of a boy is performed on the 7th day, whereas, for a daughter, it is observed on the 9th day. Both arranged and love marriages are popular. Funeral rites last for 10 to 13 days.

Rais

According to census 2011, Rai community covers 620,004 (2.3%) of the total population of Nepal. They follow Kirat religion which is based on the worship of nature. The traditional homeland of the Rai extends across Solukhumbu, Okhaldhunga, Khotang, Bhojpur and Udayapur districts. Kirat Rais speak more than 32 different languages. Wine and pork are essential materials used during religious and social ceremonies. The performance of Sakela puja is led by the Nakchong (the Rai priest) or by the head of an important family in his absence. During Sakewa puja instruments such as dhol (or dhela), jyamta, bow and arrow, chindo, yak tail, cock, and hen are used. Deceased ones are buried. Funeral procession is accompanied by the sounds of firing guns. The marriages are held by arrangements, captures, and elopements.

1. How much do 'Magars', 'Gurungs', and 'Rais' cover of the total population of Nepal?
2. Write down the festivals 'Magars', 'Gurungs', and 'Rais' celebrate?
3. Write down a short note on 'Sakela Puja'.
4. What is 'Jari Bibaha'?

Subject- Extra Reading

<https://archive.vcu.edu/english/engweb/webtexts/hour/>

Study the story 'The Story of an Hour' by Kate Chopin from the given link.

The End.