



CLASS :IV  
 Prepared by -Rajni Y.

SUBJECT: Maths  
 L -12 Angles and Turns

Pre - activity -Let's Begin (Page 176) done in text book.

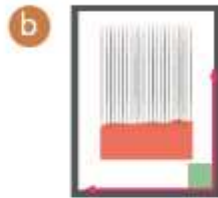
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**Pictorial Stage**

1 Identify the type of angles formed.



Obtuse

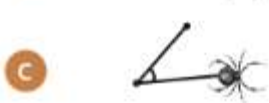


Right



Acute

2 Match the angles formed by the spider web to its correct type.



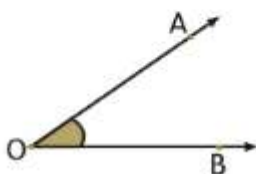
- i. Right angle
- ii. Acute angle
- iii. Obtuse angle

**Abstract Stage**

1 Write the name of the angles described below.

- a It is less than  $90^\circ$       b It is more than  $100^\circ$       c It is 2 more than 45
- Acute                      Obtuse                      Right

2 Write the names of the vertex, arms, and angle formed in the given figure.



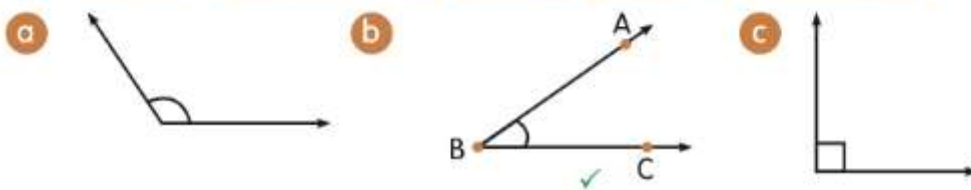
Vertex O      Angle  $\angle AOB$   
 Arms OA, OB

**Concrete Stage**

- 1 Keep your class door open in different positions and estimate the angles formed.
- 2 Open a book in different positions such that every time different angles are formed. Use a protractor to measure all the angles formed.

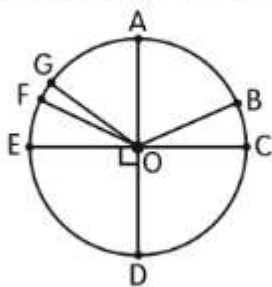
**Pictorial Stage**

- 1 Jai drew 3 different angles. Which of the angles measure  $35^\circ$ ?



- 2 Look at the figure and answer the following.

- a Name an acute, obtuse, and a right angle.



Acute angle \_\_\_\_\_ BC \_\_\_\_\_  
 Obtuse angle \_\_\_\_\_ FC \_\_\_\_\_  
 Right angle \_\_\_\_\_ AC \_\_\_\_\_

- b Are  $\angle EOD$  and  $\angle COD$  equal? Explain.

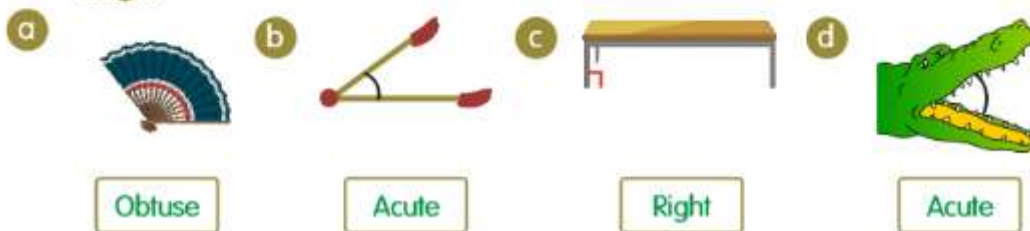
**Abstract Stage**

- 1 Use a protractor to draw the following angles.

- a  $45^\circ$       b  $130^\circ$       c  $90^\circ$       d  $150^\circ$





Answer: Do it yourself.

- 2 Measure each angle and write whether it's an acute, obtuse, or right angle.

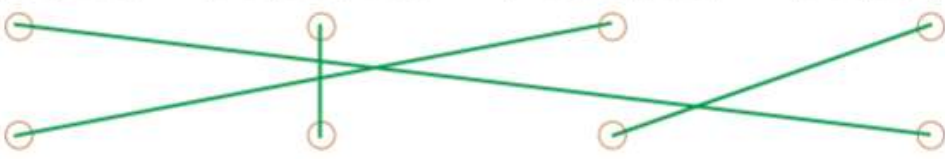


**Pictorial Stage**

1 Match the clocks to the angles formed by their hands.

a  (4 equal parts)      b  (6 equal parts)      c  (2 equal parts)      d  (3 equal parts)

i.  $180^\circ$       ii.  $60^\circ$       iii.  $120^\circ$       iv.  $90^\circ$



2 Work out the measure of the marked angle. 144°



**Abstract Stage**

1 A circle-shaped dosa is divided into a few equal parts. Each part has an angle of  $120^\circ$ . Find the number of parts the dosa was divided into.

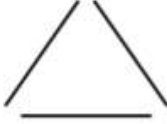
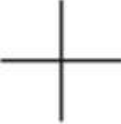
Answer: 3



2 A circle is divided into 18 equal parts. What is the angle formed by each part? What is the measure of angle formed by 5 such parts? Explain.

Answer:  $20^\circ$ ;  $72^\circ$

**Blooming Questions**


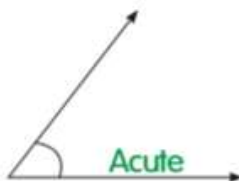
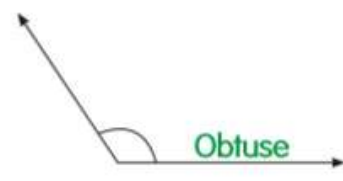
1 Sort the images into the table.

a       b 

c       d 

Lines that form angles	Lines that don't form angles
b	a
d	c

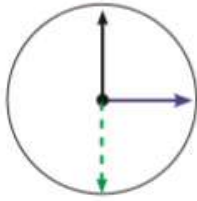
2 Name the type of angles.

a  Right      b  Acute      c  Obtuse

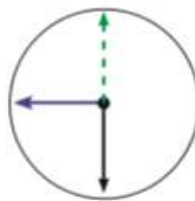
- 3 Draw the new position of the blue arrow after a quarter turn clockwise for each of the following.

**Hintometer:** Clockwise means moving in the same direction as the hands of a clock.

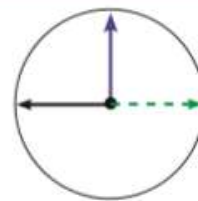
a



b



c

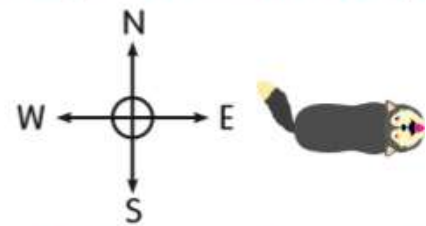


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- 4 Sarah and Arjun are discussing the type of turn the dog should make to end up facing east.

Sarah says the dog has made a three quarter turn anti-clockwise from the south.

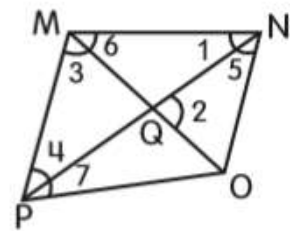
Arjun says the dog has made a quarter turn clockwise from the north.



Who is correct? Explain your reasoning. Answer: Arjun's answer is correct.

- 5 Observe the figure and answer the following questions.

- a Name the angle marked as 1 in two different ways.  
 $\angle MNQ$  or  $\angle QNM$
- b Name the vertex and arms of the angles marked as 2.  
 vertex = Q arms = QN, QO
- c Name the angle marked as 3 in two different ways.  
 $\angle PMQ$ ,  $\angle QMP$
- d Name the angle with arms NP and NM.  
 $\angle 1$



- 6 Use the given clocks to depict a time such that the angle formed by its hands is as stated below.

a



Acute angle

b



Right angle

c



Obtuse angle

## Mental Maths

Use the protractor to write the measure of each angle.

a  $\angle CAB = 12^\circ$

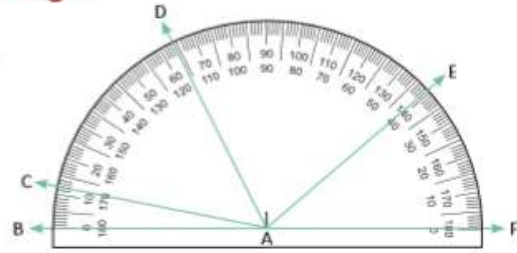
b  $\angle DAB = 69^\circ$

c  $\angle EAB = 139^\circ$

d  $\angle CAF = 168^\circ$

e  $\angle DAF = 111^\circ$

f  $\angle EAF = 41^\circ$



Post Activity- Draw the following angles using protractor in your notebook.

1. Angle of  $120^\circ$
2. Angle of  $60^\circ$
3. Angle of  $150^\circ$
4. Angle of  $145^\circ$

Subject Teacher

H.O.D.

Co-Ordinator

Principal











