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MONTH : NOVEMBER

SESSION : 15

CLASS : V

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 15

CHAPTER NAME : GEOMETRY

SUB-TOPIC : ANGLES , TYPES OF ANGLES AND MEASURING ANGLES.

EX-15 A Q. 3, 4 , 6 & 7 IN THE BOOK.

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LEARNING OBJECTIVE :

Enable learners :

- **To identify angles , types of angles**
- **To measure angles.**

Recap

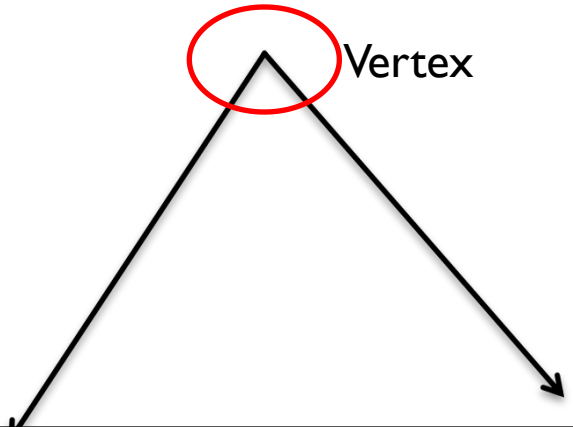
ANGLE:

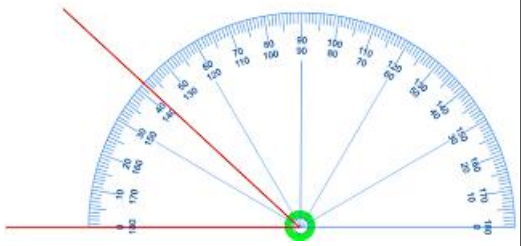
✓ Two rays starting from a common point form an angle.

✓ The two rays are called the arms of the angle.

✓ The common starting point is called vertex.

✓ An angle is denoted by the symbol ∠





TYPES OF ANGLES:

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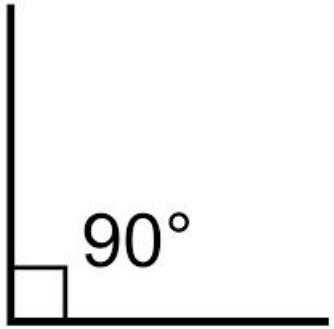
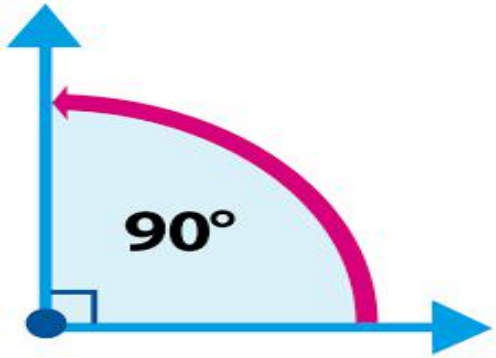
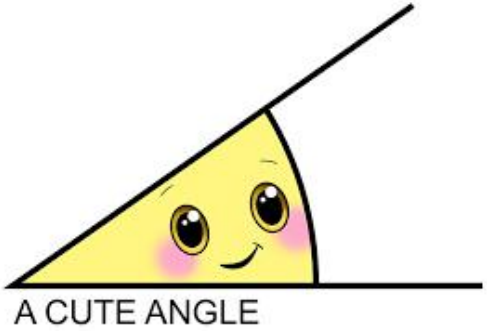
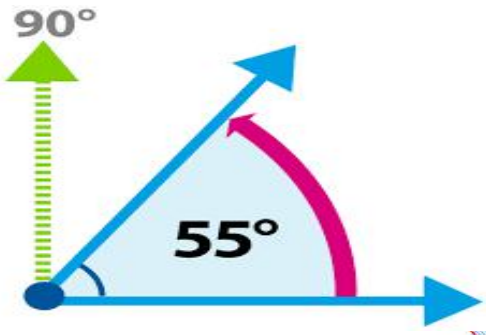
1. Right Angle- **Which is equal to 90°**

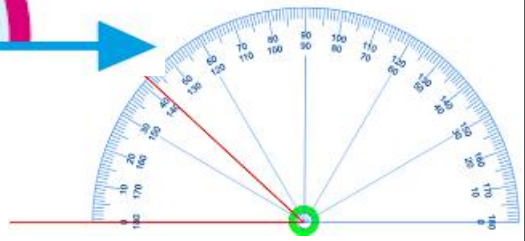




2. Acute Angle – **Which is less than 90°**







TYPES OF ANGLES:

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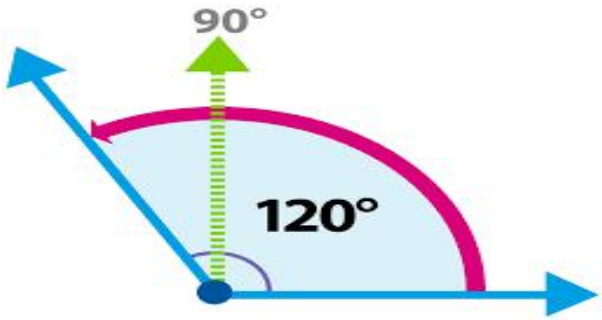
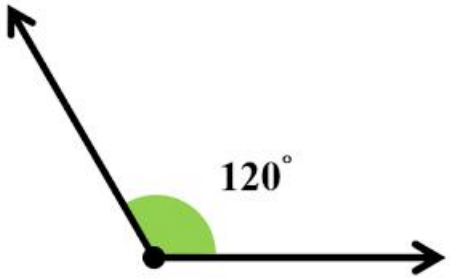
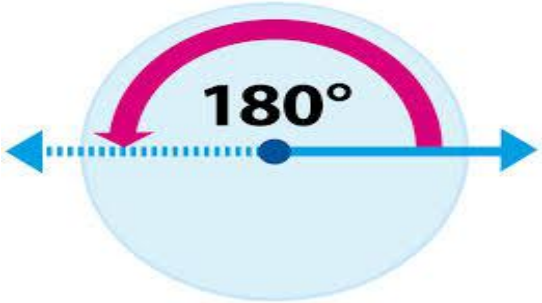
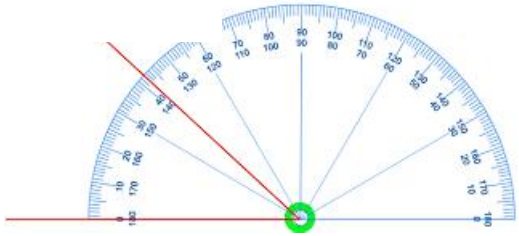
3. Obtuse Angle- **Which is more than 90°**

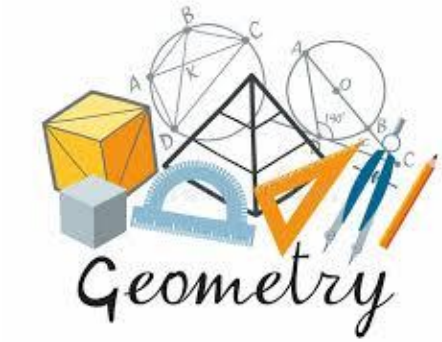




4. Straight Angle- **Which is equal to 180°**







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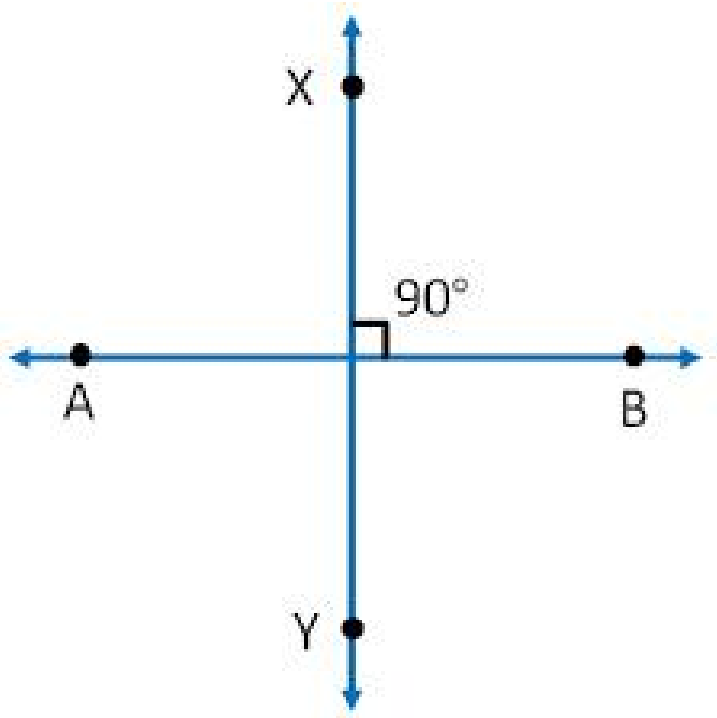
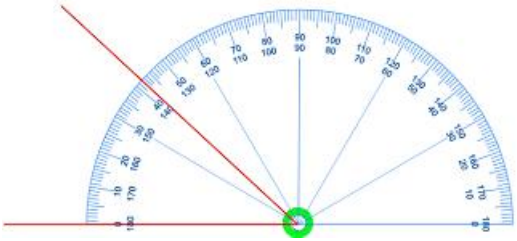
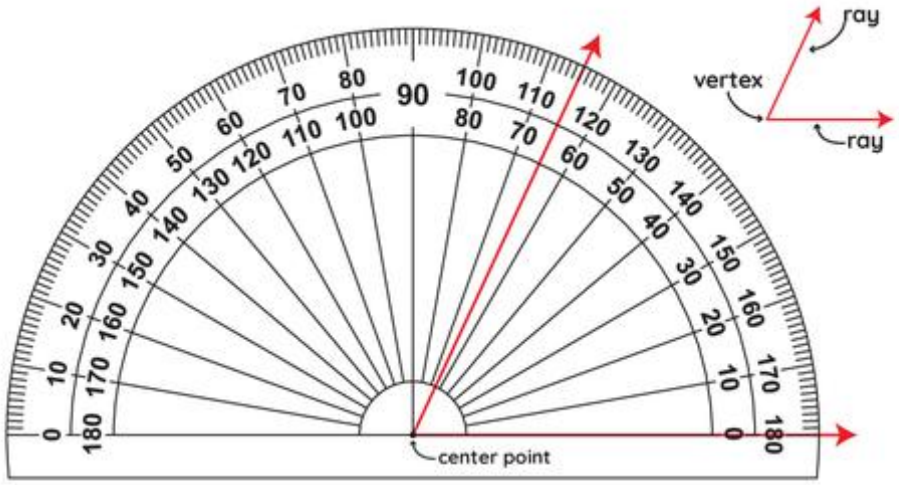
- When two lines intersect each other at 90° , they are called perpendicular lines.



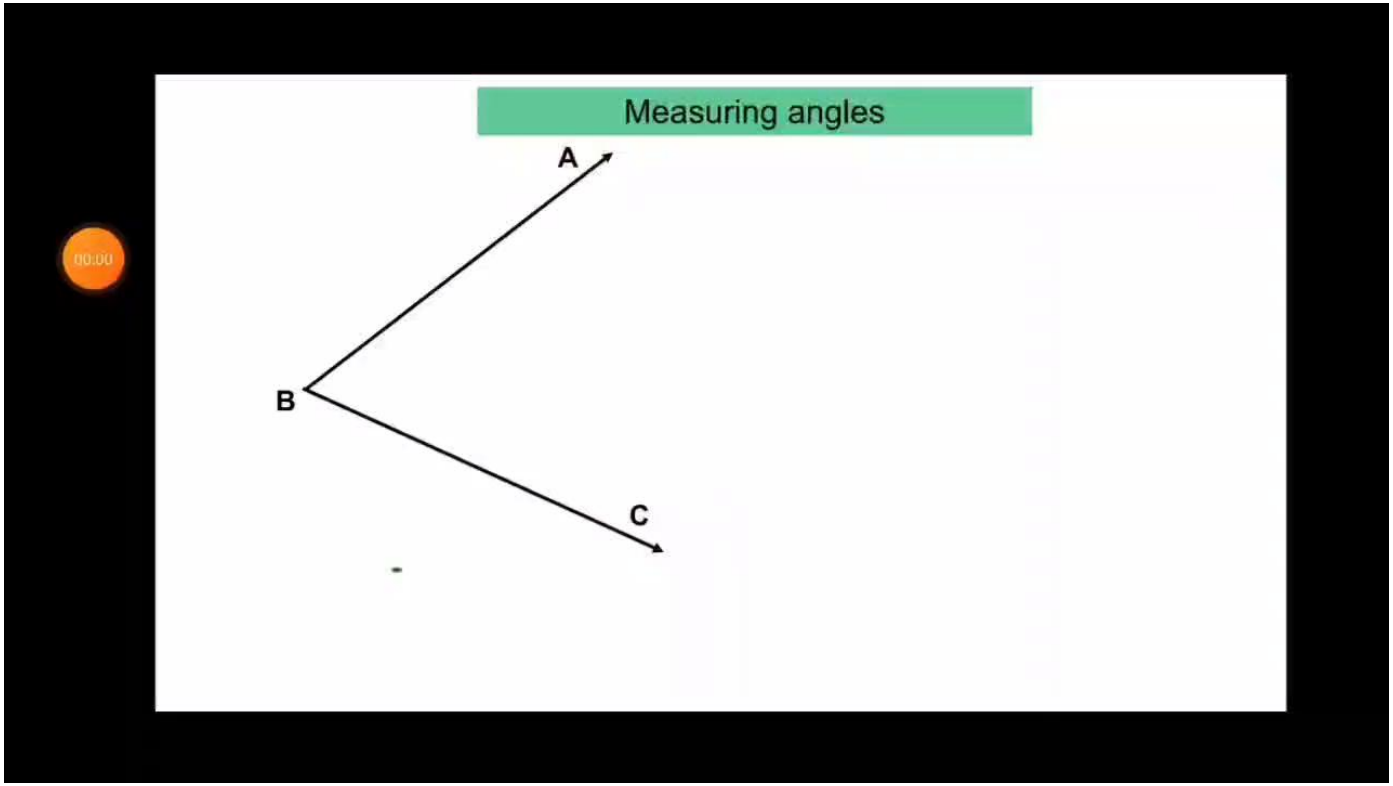


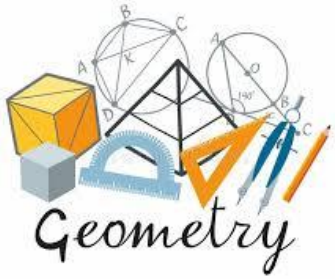
MEASUREMENT OF ANGLES.

Measuring Angles



1. Place the 'center point' of the protractor directly on top of the vertex of the angle you want to measure.
2. Line up the zero line of the protractor with the baseline, or the bottom ray of the angle.
3. Follow the second ray of the angle up to the measurements on the protractor. Be careful! Protractors usually have two sets of numbers going in opposite directions.


Measuring angles
A
B
C
00:00



EXERCISE – 15 A

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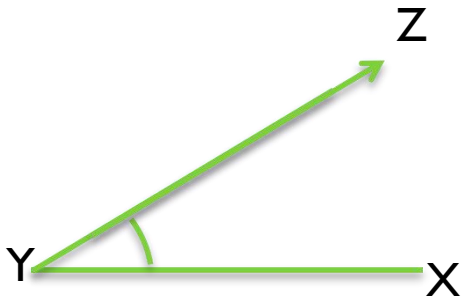
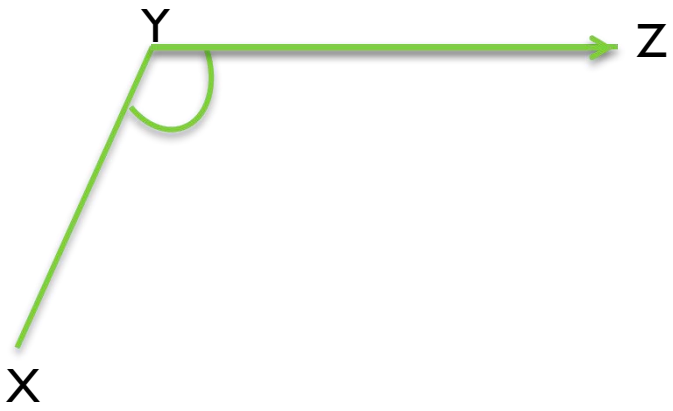
3. Write the names of the angles (acute,right, or obtuse) .

a.

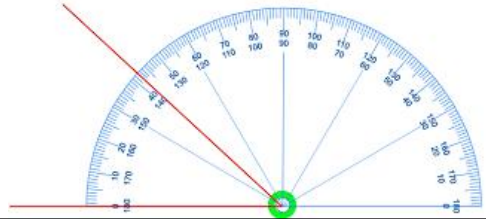


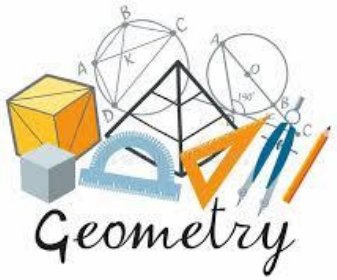
Acute Angle

b.



Obtuse Angle.





EXERCISE – 15 A

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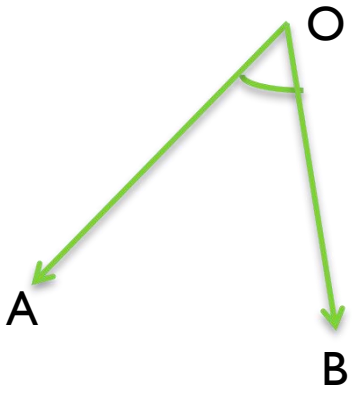
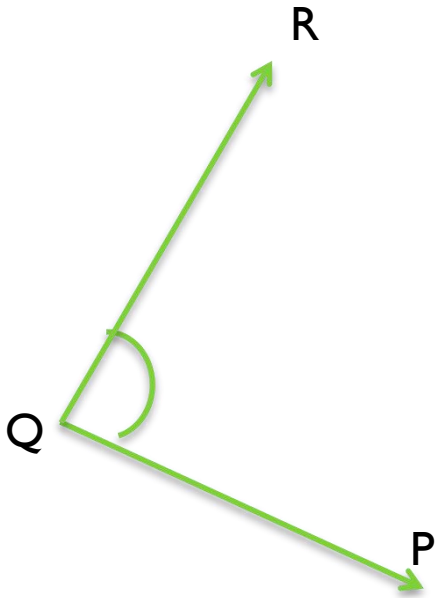
c.

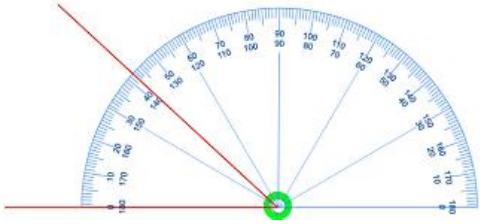


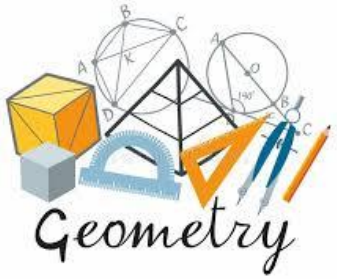
Acute Angle

d.



Right Angle





EXERCISE – 15 A

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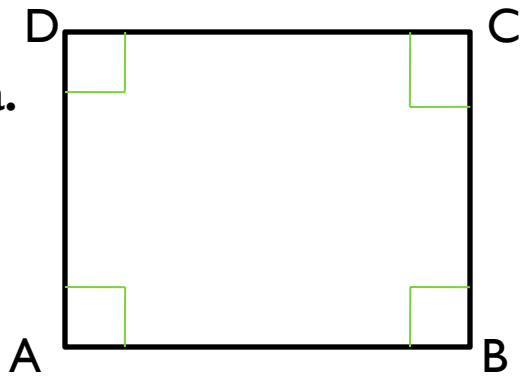
4. Find the lengths of the following line segments

a. 4.5 cm

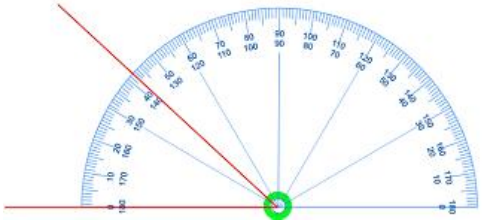
b. 1.8 cm

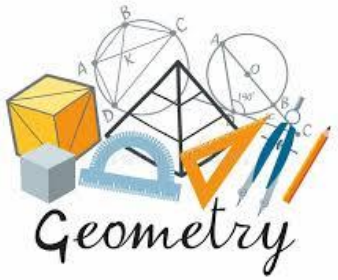
6. Measure the sides of the following .

a.



AB = BC = CD = AD = 2.7 CM





EXERCISE – 15 A

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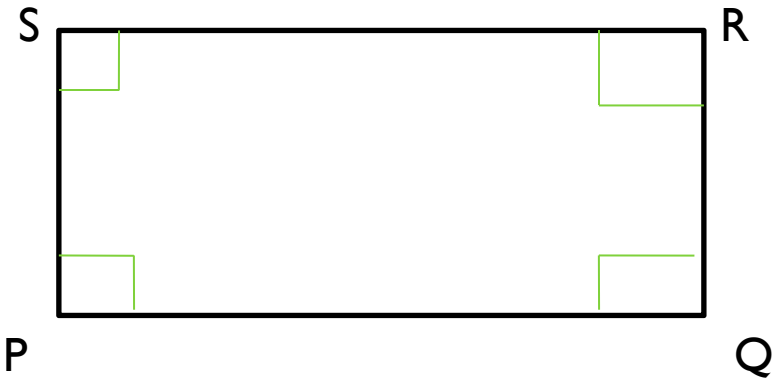
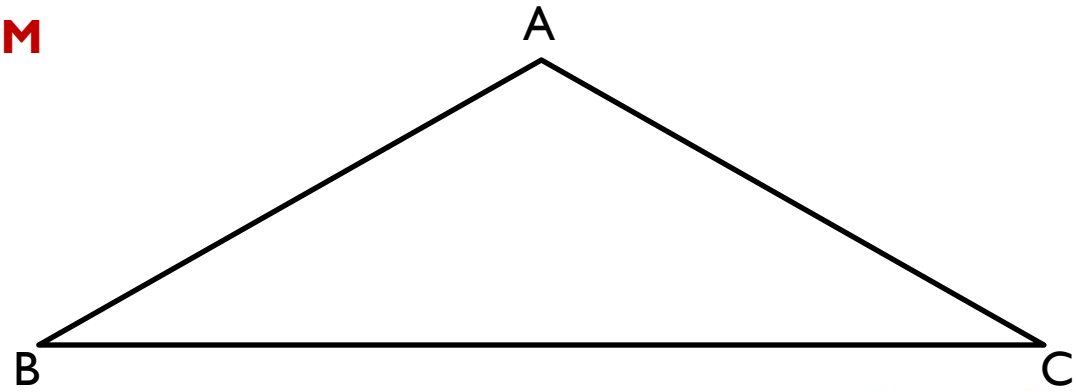
b.

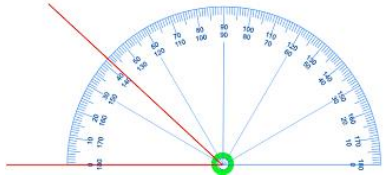


PS = QR = 2.7 CM
PQ= RS = 4.8 CM

c.



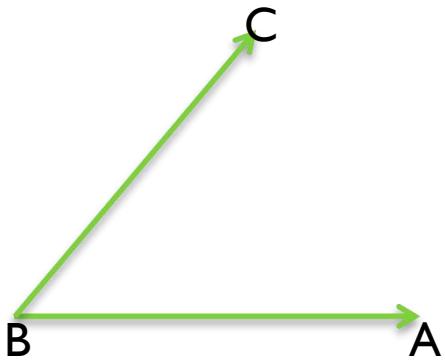
AB = AC = 3 CM
BC = 5.2 CM



EXERCISE – 15 A

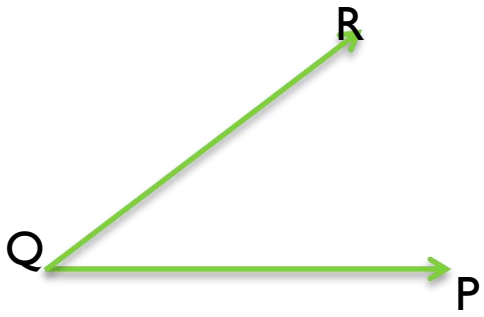
7. Measure the angles.

a.



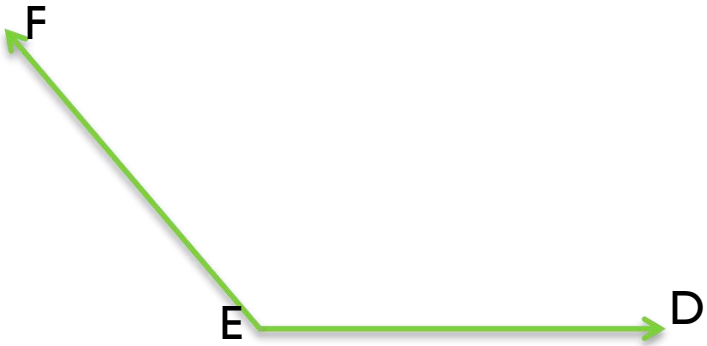
$\angle ABC = 68°$

b.

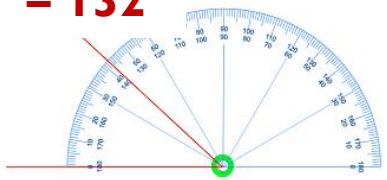


$\angle PQR = 49°$

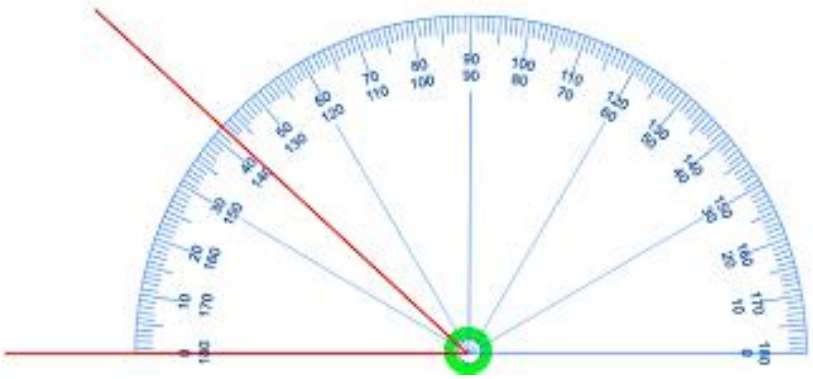
c.



$\angle DEF = 132°$



➢ **Complete Exercise 15 A Q.No. 5 and 8 in the notebook.**



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Students are able:

- ✓ To identify and define angles and types of angles.
- ✓ To measure angles and draw angles.

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THANKING YOU

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