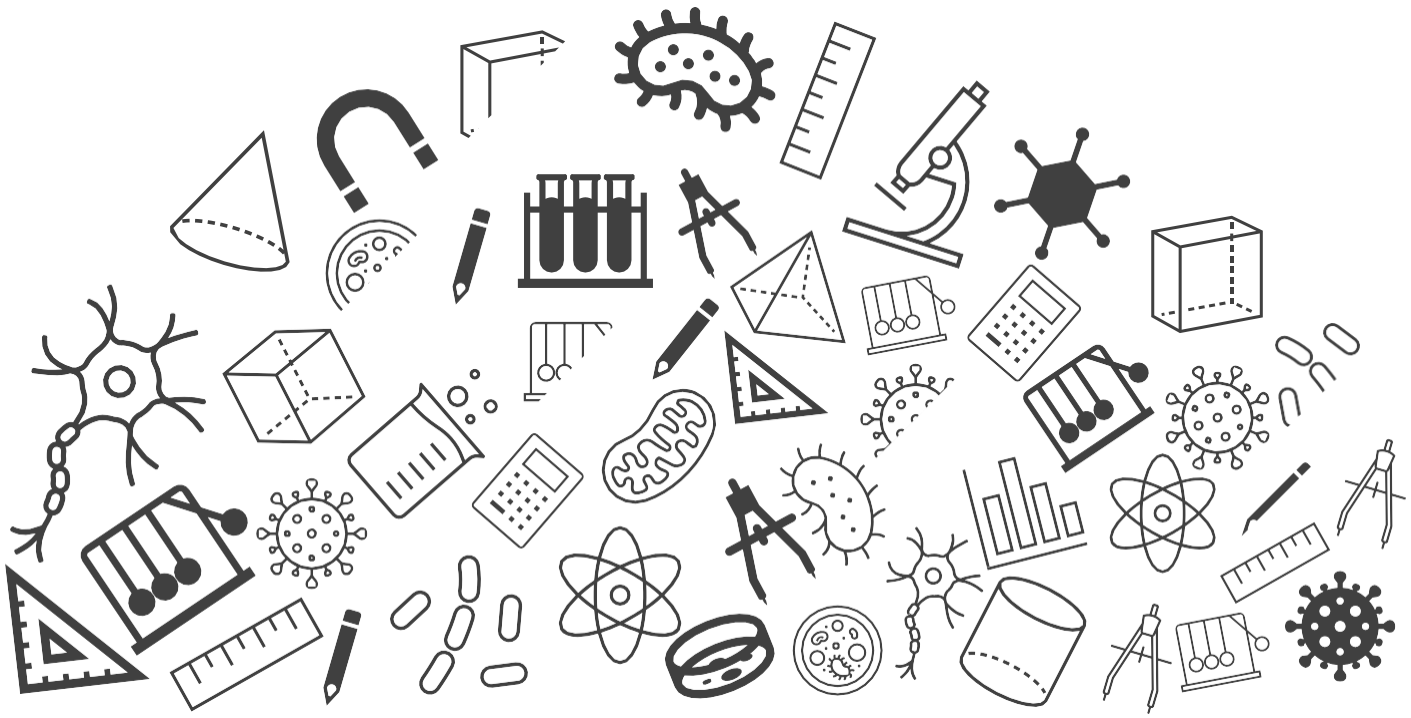
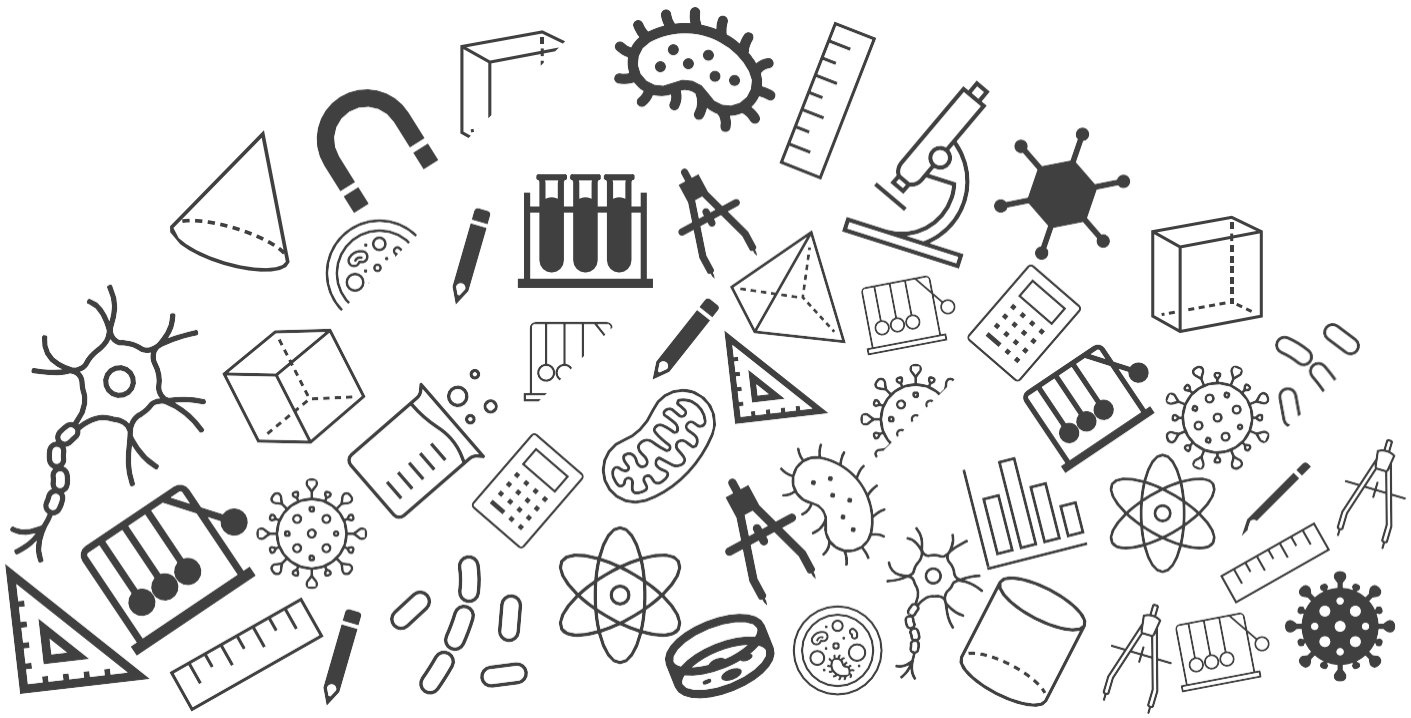
Grade 06: Maths
Exam Important Questions

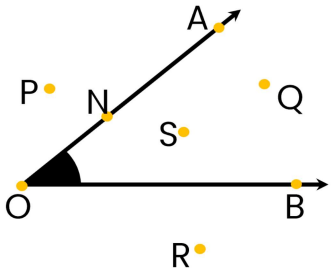


Understanding Elementary Shapes



Understanding Elementary Shapes

1. In the given figure, list the points which:
   (i) are in the interior of ∠AOB.
   (ii) are in the exterior of ∠AOB.
   (iii) lie on ∠AOB.
   [3 marks]



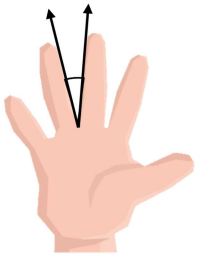
(i) The points in the interior of ∠AOB are S, and Q.
[1 mark]

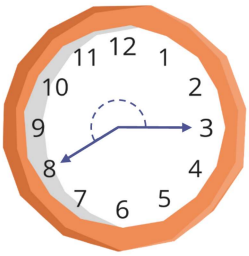
(ii) The points in the exterior of ∠AOB are P, and R.
[1 mark]

(iii) The points lie on ∠AOB are A, N, O, and B.
[1 mark]

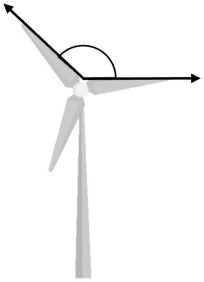
Understanding Elementary Shapes

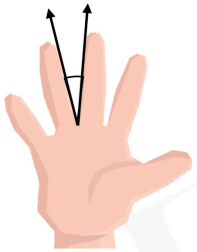
2. Name the type of angle shown in the given figures.

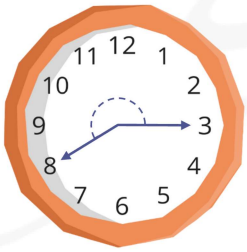




[3 marks]







[1 × 3 = 3

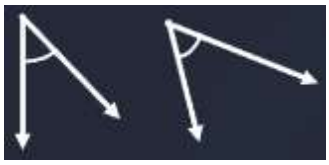
Obtuse angle

Acute angle

Reflex angle

marks]

3. From these two angles which has larger measure? Estimate and then confirm by measuring them.



[3 marks]

Step 1: Find the measure of angle

By using protractor, we can observe that the measure of angle is 45˚.
[1 mark]

Step 2: Find the measure of angle

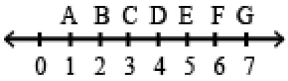
By using protractor, we can observe that the measure of angle is 55˚.
[1 mark]

Step 3: Compare the angles

Since, 55˚>45˚, this means angle shown in first figure is less than the angle in the second figure .
[1 mark]

Hence, second figure has a larger measure than first figure.

4. Verify, whether D is the midpoint of $\underline{AG}$



[3 marks]

From the given figure, it can be observed that
AD = 4-1 = 3 units
[0.5 mark]

DG = 7-4 = 3 units
[0.5 mark]

AG = 7-1 = 6 units
[0.5 mark]

Now, AD +DG = 3 + 3 = 6 units
[0.5 mark]

AD+DG=AG
[0.5 mark]

And, 2AD=2DG
[0.5 mark]

Thus, point D is the midpoint of AG.

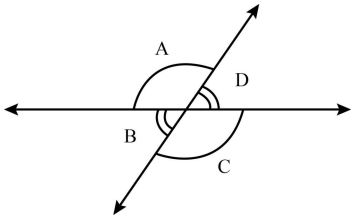
5. Identify acute, right, obtuse and reflex angles

(i) ∠A

(ii) ∠B +∠C

(iii) ∠D

(iv) ∠D+∠A+∠B



[2 marks]

(i) ∠A is an obtuse angle.
[0.5 mark]

(ii) ∠B +∠C is a straight angle
[0.5 mark]

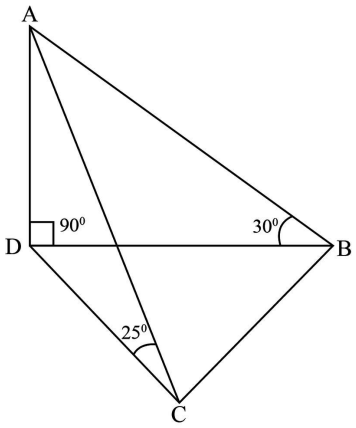
(iii) ∠D is an acute angle.
[0.5 mark]

(iv) ∠D+∠A+∠B is a reflex angle
[0.5 mark]

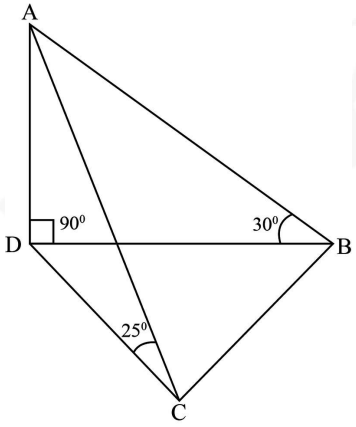
6. In the given figure, which type of angles are formed when:

(i) right angle + $\angle ABD$

(ii) $\angle ABD$ + $\angle ACD$



[2 marks]

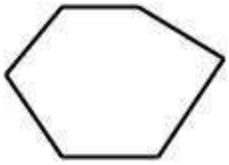


(i) right angle + $\angle ABD$ = 90^o + 30^o = 120^o
which is obtuse angle as it lies between 90^o and 180^o
[1 mark]

(ii) $\angle ABD$ + $\angle ACD$ = 30^o +25^o = 55^o which is acute angle as it is less than 90^o
[1 mark]

Understanding Elementary Shapes

7. Examine whether the following is a polygon. If it is is not, say why ?

a)  b) 

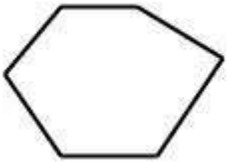
c) 

[3 marks]

Understanding Elementary Shapes

Solution:

Polygons are closed curves. They are made up entirely of line segments.

a) 

The given figure is a polygon because it is closed by line segments.

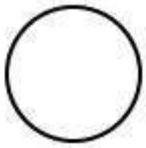
[1 mark]

b)

The given figure is not a polygon because it is not made only by line segments, it has curved surface also.

[1 mark]

c)

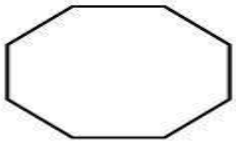
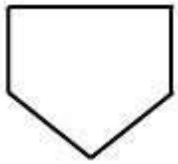


The given figure is not a polygon because it is not made by line segments.

[1 mark]

Understanding Elementary Shapes

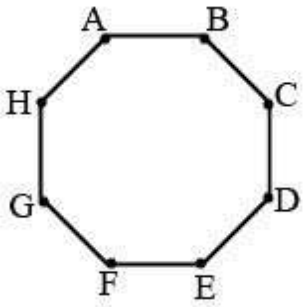
8. Name the polygon :

a)  b) 

[2 marks]

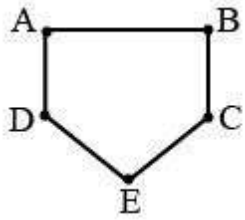
Polygons are closed curves. They are made up entirely of line segments.

a)



The given polygon is an octagon as it has eight sides AB, BC, CD, DE, EF, FG, GH, and HA.

[1 mark]

b) 

The given polygon is a pentagon as it has five sides AB, BC, CD, DE and AE.

[1 mark]