

RD SHARMA

Solutions

Class 6 Maths

Chapter 11

Ex 11.1

Q.1 Give three examples of angles from your environment.

Soln.1 :

Three examples of angles from our environment are:

- (i) Angle formed by the minute and hour hands of an analog clock.
- (ii) Angle formed by the two adjacent walls of a room
- (iii) Angle formed by the two adjacent fingers of our hand.

Q.2 Write the arms and the vertex of $\angle LMP$ given in the figure.

Soln.2 :

Arms of $\angle LMP$ are MP and ML . Further, its vertex is M .

Q.3 How many angles are formed in the figures given ? Name them. (fig. from book)

Soln.3 :

- (i) Three angles are formed, namely $\angle ABC$, $\angle BAC$, and $\angle ACB$.
- (ii) Four angles are formed, namely $\angle ABC$, $\angle ADC$, $\angle BCD$, and $\angle BAD$.
- (iii) Eight angles are formed namely $\angle ADC$, $\angle ACD$, $\angle DAC$, $\angle ACB$, $\angle ABC$, $\angle BAC$, $\angle BCD$, and $\angle BAD$.

Q.4 From figure, list the points which are : (fig. from book)

(i) in the interior of $\angle P$

(ii) in the exterior of $\angle P$

(iii) lie on $\angle P$

Soln.4 :

- (i) Points J and C lie in the interior of $\angle P$.
- (ii) Points D and B lie in the exterior of $\angle P$.
- (iii) Points A , P and M lie on $\angle P$.

Q.5 In the figure, write another name for : (fig. from book)

(i) $\angle 1$.

(ii) $\angle 2$.

(iii) $\angle 3$.

(iv) $\angle 4$.

Soln.5 :

- (i) Another name for $\angle 1$ is $\angle BOD$.
- (ii) Another name for $\angle 2$ is $\angle BOC$.
- (iii) Another name for $\angle 3$ is $\angle AOC$.
- (iv) Another name for $\angle 4$ is $\angle AOD$.

Q.6 In the figure, write another name for : (fig. from book)

(i) $\angle 1$.

(ii) $\angle 2$.

(iii) $\angle 3$.

Soln.6 :

- (i) $\angle BPE$
- (ii) $\angle PQC$
- (iii) $\angle DQF$

Q.7 In the given fig., which of the following statements are true: (fig. from book)

(i) Point B in the interior of $\angle AOB$

(ii) Point B in the interior of $\angle AOC$

(iii) Point A in the interior of $\angle AOD$

(iv) Point C in the exterior of $\angle AOB$

(v) Point D in the exterior of $\angle AOC$

Soln.7 :

(ii), (iv), and (v) are true statements.

(i), and (iii) are incorrect statements as B lies on $\angle AOB$ and A lies on $\angle AOD$.

Q.8 Which of the following statements are true :

(i) The vertex of an angle lies in its interior.

(ii) The vertex of an angle lies in its exterior.

(iii) The vertex of an angle lies on it.

Soln.8 :

(iii) The vertex of an angle lies on it.

This is the only correct statement.

Q.9 By simply looking at the pair of angles given in figure, state which of the angles in each of the pairs is greater. (fig. from book)

Soln.9 :

(i) $\angle AOB$ is greater than $\angle DEF$.

(ii) $\angle PQR$ is greater than $\angle LMN$.

(iii) $\angle UVW$ is greater than $\angle XYZ$.

Q.10 By using tracing paper compare the angles in each of the pairs given in figure, (fig. from book)

Soln.10 :

Using tracing paper, we get that:

(i) $\angle PQR$ is greater than $\angle AOB$.

(ii) $\angle UVW$ is greater than $\angle LMN$.

(iii) $\angle RST$ is greater than $\angle XYZ$.

(iv) $\angle PQR$ is greater than $\angle EFG$.