



Angles Ex 11.2 Q7

**Answer :**

In one turn, the wheel of a bicycle covers  $360^\circ$ .

If we express  $360^\circ$  in right angles, we get:

$$\frac{360^\circ}{90^\circ} = 4 \text{ right angles}$$

Thus, in four and a half turns, the wheel will turn by  $(4 \times 4.5) = 18$  right angles

Angles Ex 11.2 Q8

**Answer :**

The time interval between 8:00 O'clock and 10:30 O'clock is 2.5 hours, i.e., two and a half hours.

In 1 hour, the minute hand turns by a complete angle, i.e.,  $360^\circ$  or  $360^\circ/90^\circ = 4$  right angles.

Thus, in 2.5 hours, the minute hand will turn by  $2.5 \times 4 = 10$  right angles.

Angles Ex 11.2 Q9

**Answer :**

In a bicycle, the central angle measures  $360^\circ$  and it consists of 48 spokes.

$$\therefore \text{Angle between any two adjacent spokes} = \frac{360}{48} = 7.5^\circ$$

Angles Ex 11.2 Q10

**Answer :**

An acute angle measures between  $0^\circ$  and  $90^\circ$ ; an obtuse angle measures between  $90^\circ$  and  $180^\circ$ ; a straight angle measures  $180^\circ$ ; a right angle measures  $90^\circ$ ; a zero angle measures  $0^\circ$  and a complete angle measures  $360^\circ$ .

(i)  $118^\circ$  is an obtuse angle.

(ii)  $29^\circ$  is an acute angle.

(iii)  $145^\circ$  is an obtuse angle.

(iv)  $165^\circ$  is an obtuse angle.

(v)  $0^\circ$  is a zero angle.

(vi)  $75^\circ$  is an acute angle.

(vii)  $180^\circ$  is a straight angle.

(viii)  $89.5^\circ$  is an acute angle.

(ix)  $30^\circ$  is an acute angle.

(x)  $90^\circ$  is a right angle.

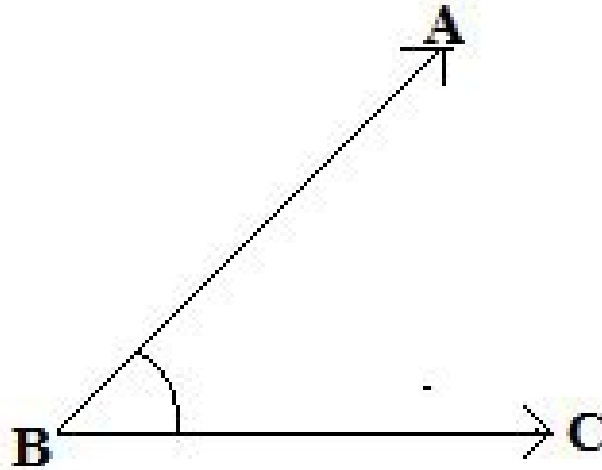
(xi)  $179^\circ$  is an obtuse angle.

(xii)  $360^\circ$  is a complete angle.

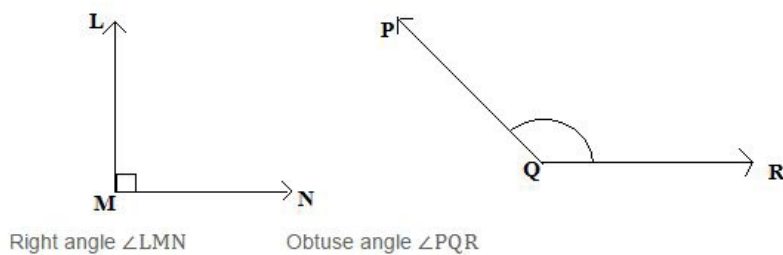
(xiii)  $90\frac{1}{2}^\circ$  is an obtuse angle.

Angles Ex 11.2 Q11

**Answer :**



Acute angle  $\angle ABC$



Angles Ex 11.2 Q12

**Answer :**

- (i) East and west directions form an angle of  $180^\circ$ , which is a straight angle.
- (ii) East and north directions form an angle of  $90^\circ$ , which is a right angle.
- (iii) North and north-east directions form an angle of  $45^\circ$ , which is an acute angle.
- (iv) North and south-east directions form an angle of  $135^\circ$ , which is an obtuse angle.

Angles Ex 11.2 Q13

**Answer :**

- (i) Acute angle, as it measures between  $0^\circ$  and  $90^\circ$ .
- (ii) Obtuse angle, as it measures between  $90^\circ$  and  $180^\circ$ .
- (iii) Straight angle, as it is equal to  $180^\circ$ .
- (iv) Right angle, as it is equal to  $90^\circ$ .
- (v) Complete angle, as it is equal to  $360^\circ$ .

\*\*\*\*\* END \*\*\*\*\*

