

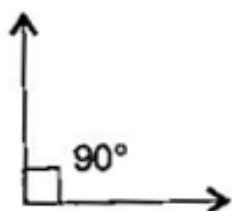


NCERT SOLUTIONS FOR CLASS 6 MATHS  
UNDERSTANDING ELEMENTARY SHAPES EX 5.4

**Q1.** What is the measure of (i) a right angle? (ii) a straight angle?

**Ans:**

(i)  $90^\circ$



(ii)  $180^\circ$



**Q2.** Say True or False:

(a) The measure of an acute angle  $< 90^\circ$ .

(b) The measure of an obtuse angle  $> 90^\circ$ .

(c) The measure of a reflex angle  $> 180^\circ$ .

(d) The measure of one complete

revolution  $= 360^\circ$ .

(e) If  $m\angle A = 53^\circ$  and  $m\angle B$

$= 35^\circ$ , then  $m\angle A > m\angle B$ .

**Ans:** (a) True, (b) False, (c) True, (d) True, (e) True

**Q3.** Write down the measure of:

(a) some acute angles (b) some obtuse angles

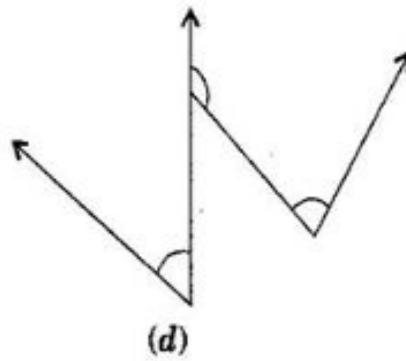
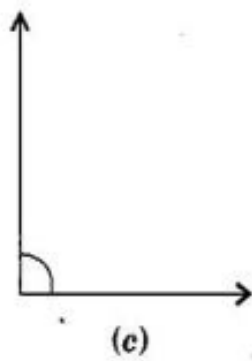
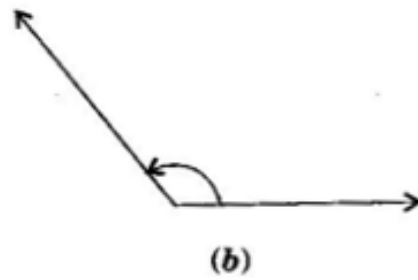
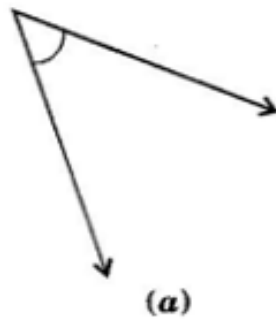
(give at least two examples of each)

**Ans:**

(a)  $35^\circ, 20^\circ$

(b)  $110^\circ, 135^\circ$

**Q4.** Measure the angles given below, using the protractor and write down the measure:



**Ans:**

(a)  $40^\circ$

(b)  $130^\circ$

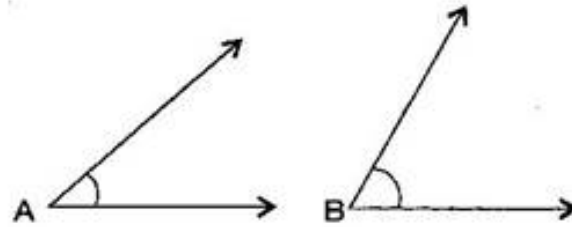
(c)  $90^\circ$

(d)  $60^\circ$

**Q5.** Which angle has a large measure? First estimate and then measure:

Measure of angle A =

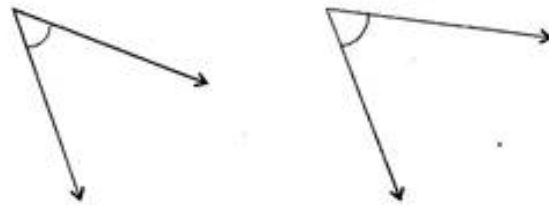
Measure of angle B =



**Ans:**  $\angle B$  has larger measure.

$\angle A = 40^\circ$  and  $\angle B = 65^\circ$

**Q6.** From these two angles which has larger measure? Estimate and then confirm by measuring them:



**Ans:** Second angle has larger measure.

**Q7.** Fill in the blanks with acute, obtuse, right or straight:

(a) An angle whose measure is less than that of a right angle is \_\_\_\_\_.

(b) An angle whose measure is greater than that of a right angle is \_\_\_\_\_.

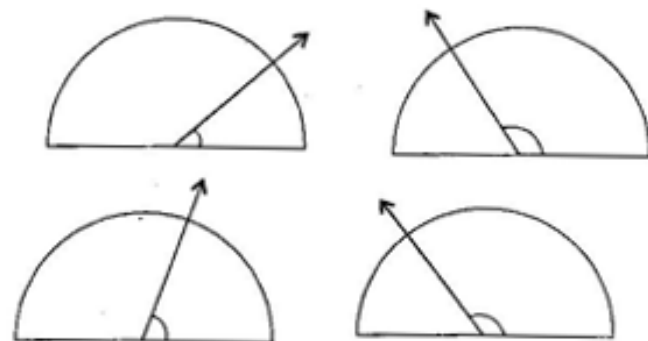
(c) An angle whose measure is the sum of the measures of two right angles is \_\_\_\_\_.

(d) When the sum of the measures of two angles is that of a right angle, then each one of them is \_\_\_\_\_.

(e) When the sum of the measures of two angles is that of a straight angle and if one of them is acute then the other should be \_\_\_\_\_.

**Ans:** (a) acute angle, (b) obtuse angle, (c) straight angle, (d) acute angle, (e) obtuse angle

**Q8.** Find the measure of the angle shown in each figure. (First estimate with your eyes and then find the actual measure with a protractor).



**Ans:**

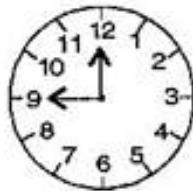
(i)  $30^\circ$

(ii)  $120^\circ$

(iii)  $60^\circ$

(iv)  $150^\circ$

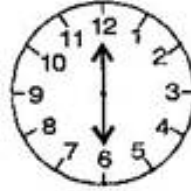
**Q9.** Find the angle measure between the hands of the clock in each figure:



9.00 a.m.



1.00 p.m.



6.00 p.m.

**Ans:**

(i)  $90^\circ$  (Right angle)

(ii)  $30^\circ$  (Acute angle)

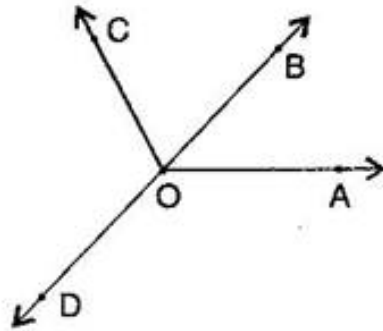
(iii)  $180^\circ$  (Straight angle)

**Q10.** Investigate:

In the given figure, the angle measure  $30^\circ$ . Look at the same figure through a magnifying glass. Does the angle become larger? Does the size of the angle change?



**Q11.** Measure and classify each angle:



Angle	$\angle AOB$	$\angle AOC$	$\angle BOC$	$\angle DOC$	$\angle DOA$	$\angle DOB$
Measure						
Type						

**Ans:**

Sol.

Angle	$\angle AOB$	$\angle AOC$	$\angle BOC$	$\angle DOC$	$\angle DOA$	$\angle DOB$
Measure	$40^\circ$	$130^\circ$	$90^\circ$	$90^\circ$	$140^\circ$	$180^\circ$
Type	Acute	Obtuse	Right	Right	Obtuse	straight

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