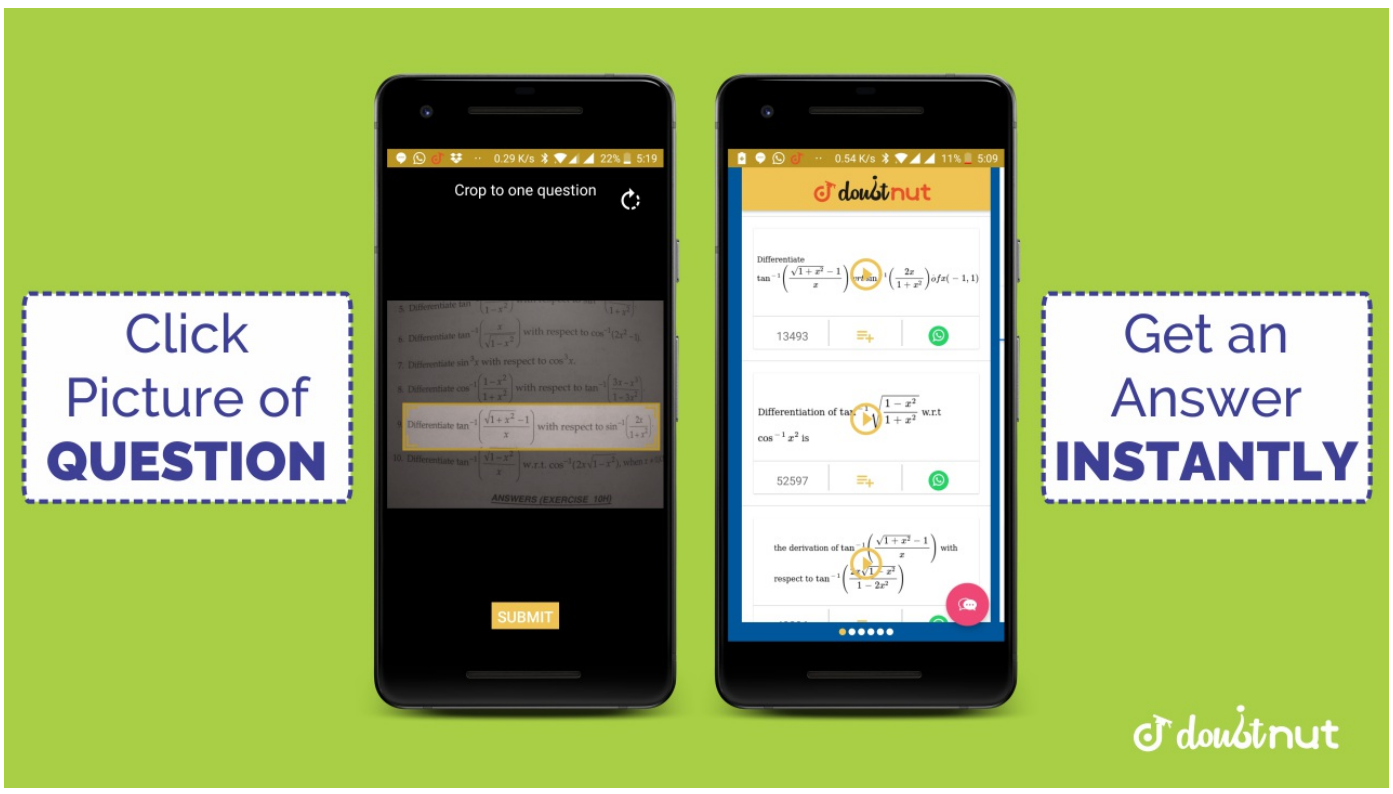
NCERT MATHS SOLUTIONS

Class - 9 || LINES AND ANGLES

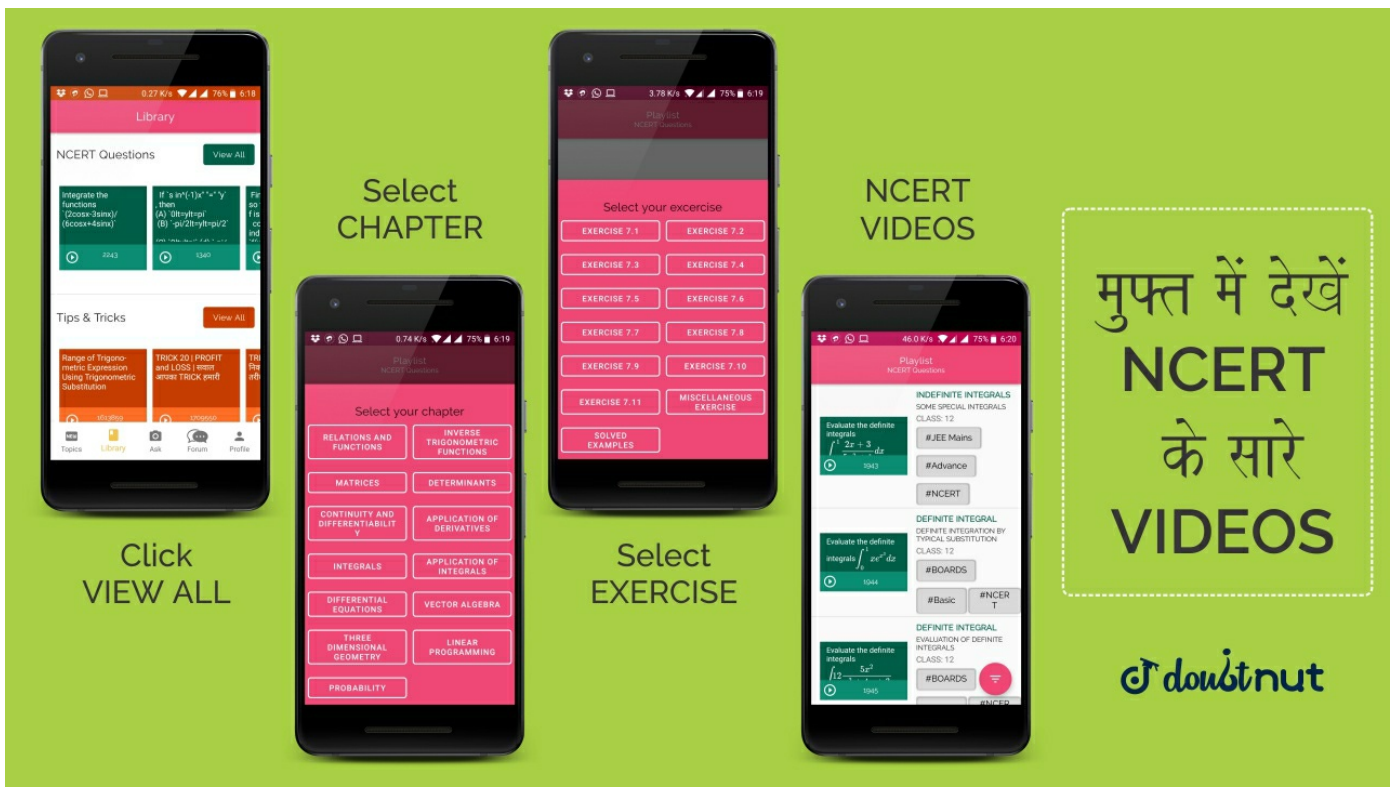
Ques No.	Question
1	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.1 - Q 1** In Fig. 6.13, lines AB and CD intersect at O. If $\angle AOC\ + \angle BOE = 70o$ and $\angle BOD = 40o$, find $\angle BOE$ and $reflex\angle COE$. Watch Free Video Solution on Doubtnut
2	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.1 - Q 2** In fig: 6.14, lines XY and MN intersect at O. If $\angle POY = 90^\circ$ and $a : b = 2 : 3$, find c. Watch Free Video Solution on Doubtnut
3	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.1 - Q 3** In Fig. 6.15, $\angle PQR = \angle PRQ$, then prove that $\angle PQS = \angle PRT$. Watch Free Video Solution on Doubtnut
4	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.1 - Q 4** In Fig. 6.16, if $x + y = w + z$, then prove that AOB is a line. Watch Free Video Solution on Doubtnut
5	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.1 - Q 5** In Fig. 6.17, POQ is a line. Ray OR is perpendicular to line PQ. OS is another ray lying between rays OP and OR. Prove that $\angle ROS = \frac{1}{2}(\angle QOS - \angle POS)$. Watch Free Video Solution on Doubtnut

6	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.1 - Q 6** It is given that $\angle XYZ = 64o$ and XY is produced to point P. Draw a figure from the given information. If ray YQ bisects $\angle ZYP$, find $\angle XYQ$ and $reflex\angle QYP$. Watch Free Video Solution on Doubtnut
7	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.2 - Q 1** In Fig. 6.28, find the values of x and y and then show that AB || CD. Watch Free Video Solution on Doubtnut
8	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.2 - Q 2** In Fig. 6.29, if AB || CD, CD || EF and $y : z = 3 : 7$, find x. Watch Free Video Solution on Doubtnut
9	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.2 - Q 3** In Fig. 6.30, if $AB \backslash \| \| CD, \backslash \quad EF$ $\perp CD \backslash \quad and$ $\angle GED = 126o,$ $\backslash \text{ find } \quad (\angle AGE,$ $\angle GEF \backslash \quad and$ $\angle FGE9)$. Watch Free Video Solution on Doubtnut
	NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.2 - Q 4 In Fig. 6.31, if

10	$PQ \quad \| \| \quad ST,$ $\angle PQR = 110^o \backslash$ $and_R ST = 130^o,$ $\backslash \quad f \in d\angle QRS$. Watch Free Video Solution on Doubtnut
11	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.2 - Q 5** In Fig. 6.32, if $AB \| \| CD, \angle APQ$ $= 50^\circ \backslash \quad and$ $\angle PRD = 127^\circ$, find x and y. Watch Free Video Solution on Doubtnut
	
12	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.2 - Q 6** In Fig. 6.33, PQ and RS are two mirrors placed parallel to each other. An incident ray AB strikes the mirror PQ at B, the reflected ray moves along the path BC and strikes the mirror RS at C and again reflects back along CD. Prove that AB || CD. Watch Free Video Solution on Doubtnut
13	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.3 - Q 1** In Fig. 6.39, sides QP and RQ of ΔPQR are produced to points S and T respectively. If $\angle SPR = 135^\circ \backslash$ $and \angle PQT$ $= 110^\circ, \backslash \text{ find}$ $\angle PRQ$. Watch Free Video Solution on Doubtnut

14	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.3 - Q 2** In Fig. 6.40, $\angle X = 62o, \angle XYZ = 54o$. If YO and ZO are the bisectors of $\angle XYZ\ \ and$ $\angle XZY$ respectively of $\Delta XYZ, \ \ f \in d$ $\angle OZY\ \ and \angle YOZ$. Watch Free Video Solution on Doubtnut
15	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.3 - Q 3** In Fig. 6.41, if $AB\ \ \|\ \ \|\ \ DE,$ $\angle BAC = 35^\circ\ \ and$ $\angle CDE = 53^\circ,$ $\text{find}\ \ \angle DCE$. Watch Free Video Solution on Doubtnut
16	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.3 - Q 4** In Fig. 6.42, if lines PQ and RS intersect at point T, such that $\angle PRT = 40^\circ,$ $\angle RPT = 95^\circ and$ $\angle TSQ = 75^\circ,\ f \in d$ /_S Q T` . Watch Free Video Solution on Doubtnut
17	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.3 - Q 5** In Fig. 6.43, if $PQ \perp PS, \ \ PQ\ \ \|\ \ \|\ \ SR, \angle SQR = 28o\ \ and \angle QRT = 65o$, then find the values of x and y. Watch Free Video Solution on Doubtnut

18	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - EXERCISE 6.3 - Q 6** In Fig. 6.44, the side QR of PQR is produced to a point S. If the bisectors of $\angle PQR \quad and \angle PRS$ meet at point T, then prove that $\angle QTR = \frac{1}{2}\angle QPR$. Watch Free Video Solution on Doubtnut
19	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - SOLVED EXAMPLES - Q 1** In Fig: 6.9. lines PQ and RS intersect each other at point O. If $\angle POR : \angle ROQ = 5$ $: 7,$ find the all the angles. Watch Free Video Solution on Doubtnut
20	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - SOLVED EXAMPLES - Q 2** In Fig. 6.10, ray OS stands on a line POQ. Ray OR and ray OT are angle bisectors of $\angle POS$ and $\angle SOQ$, respectively. If $\angle POS = x$, find $\angle ROT$. Watch Free Video Solution on Doubtnut
21	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - SOLVED EXAMPLES - Q 3** In Fig. 6.11, OP, OQ, OR and OS are four rays. Prove that $\angle POQ + \angle QOR + \angle SOR + \angle POS = 360o$ Watch Free Video Solution on Doubtnut
	NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - SOLVED EXAMPLES - Q 4

22	In Fig. 6.24, if $PQ \mid \mid RS, \angle MXQ = 135^\circ \backslash \ and \ \angle MYR = 40^\circ, \backslash \text{find} \ \ \angle XMY$. Watch Free Video Solution on Doubtnut
23	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - SOLVED EXAMPLES - Q 5** If a transversal intersects two lines such that the bisectors of a pair of corresponding angles are parallel, then prove that the two lines are parallel. Watch Free Video Solution on Doubtnut
	
24	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - SOLVED EXAMPLES - Q 6** In Fig. 6.27, AB || CD and CD || EF. Also $EA \perp AB$. If $\angle BEF = 55o$, find the values of x, y and z. Watch Free Video Solution on Doubtnut
25	**NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - SOLVED EXAMPLES - Q 7** In Fig. 6.37, if $QT \perp PR, \angle TQR = 40^\circ and \angle SPR = 30^\circ$, find x and y. Watch Free Video Solution on Doubtnut
	NCERT - CLASS 9 - CHAPTER 6 LINES AND ANGLES - SOLVED EXAMPLES - Q

26	**8** In Fig. 6.38, the sides AB and AC of ABC are produced to points E and D respectively. If bisectors BO and CO of CBE and BCD respectively meet at point O, then prove that $\angle BOC = 90o - \frac{1}{2}$ $\angle BAC$. Watch Free Video Solution on Doubtnut