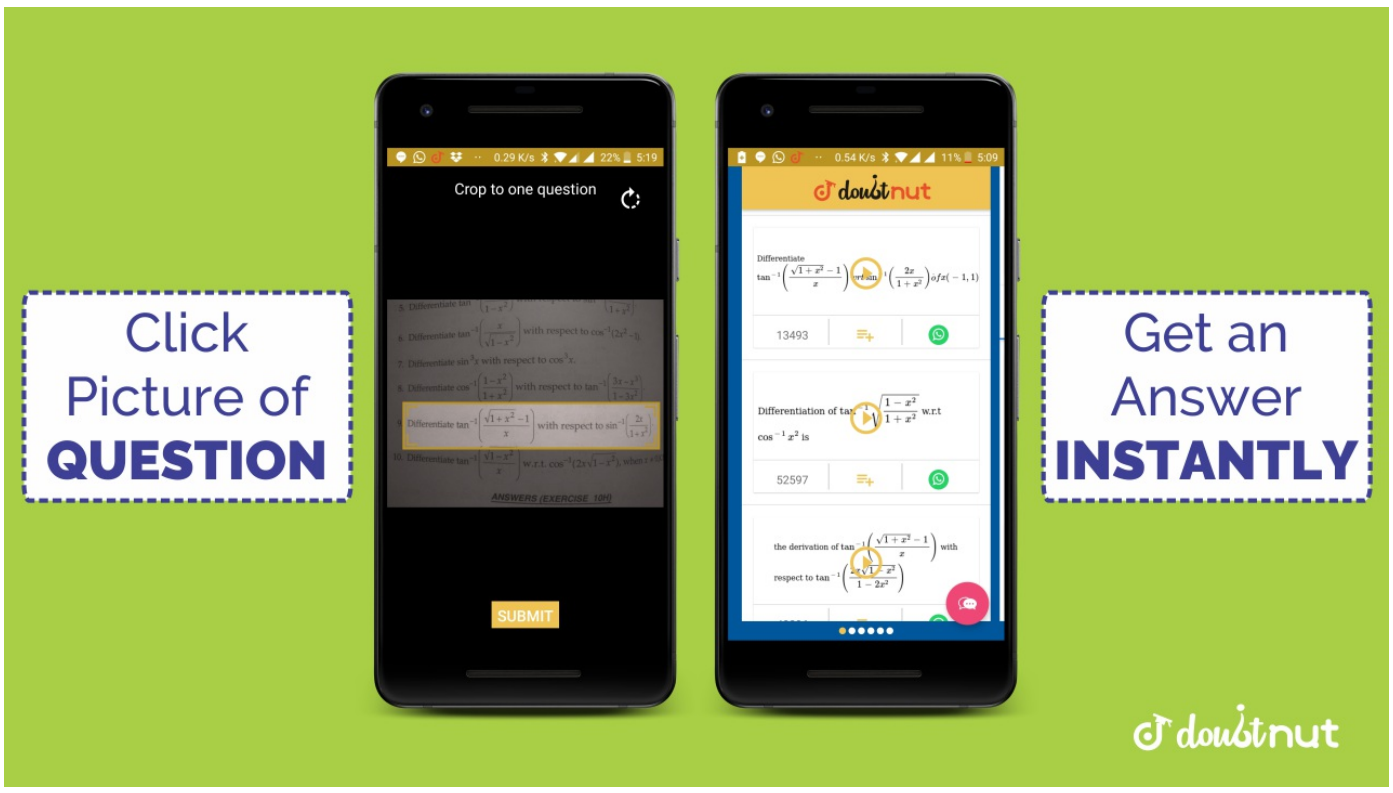
BOARDS CONCEPTS BOOSTER

TRIANGLES

Download Doubtnut Today

Ques No.	Question
1	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **1. SIMILARITY** 1. What we already learned in previous classes Click to LEARN this concept/topic on Doubtnut
2	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **1. SIMILARITY** 2. How similarity is different from congruence. Click to LEARN this concept/topic on Doubtnut
3	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **1. SIMILARITY** 3. Similar Polygons Click to LEARN this concept/topic on Doubtnut

4	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **1. SIMILARITY** 4. Similar Triangles and their properties Click to LEARN this concept/topic on Doubtnut
5	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **2. SIMILAR TRIANGLES AND THEIR PROPERTIES** 1. Basic proportionality Theorem or Thales Theorem - If a line is drawn parallel to one side of a triangle intersecting the other two sides; then it divides the two sides in the same ratio. Click to LEARN this concept/topic on Doubtnut
6	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **2. SIMILAR TRIANGLES AND THEIR PROPERTIES** 2. If in a ΔABC; a line DE||BC; intersects AB in D and AC in E; Then $AB/\ AD$ = AC/AE Click to LEARN this concept/topic on Doubtnut
7	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **2. SIMILAR TRIANGLES AND THEIR PROPERTIES** 3. Converse of Basis proportionality theorem : If a line divides any two sides of a triangle in the same ratio; then the line must be parallel to the third side. Click to LEARN this concept/topic on Doubtnut
	
	CONCEPT FOR BOARDS || Chapter TRIANGLES

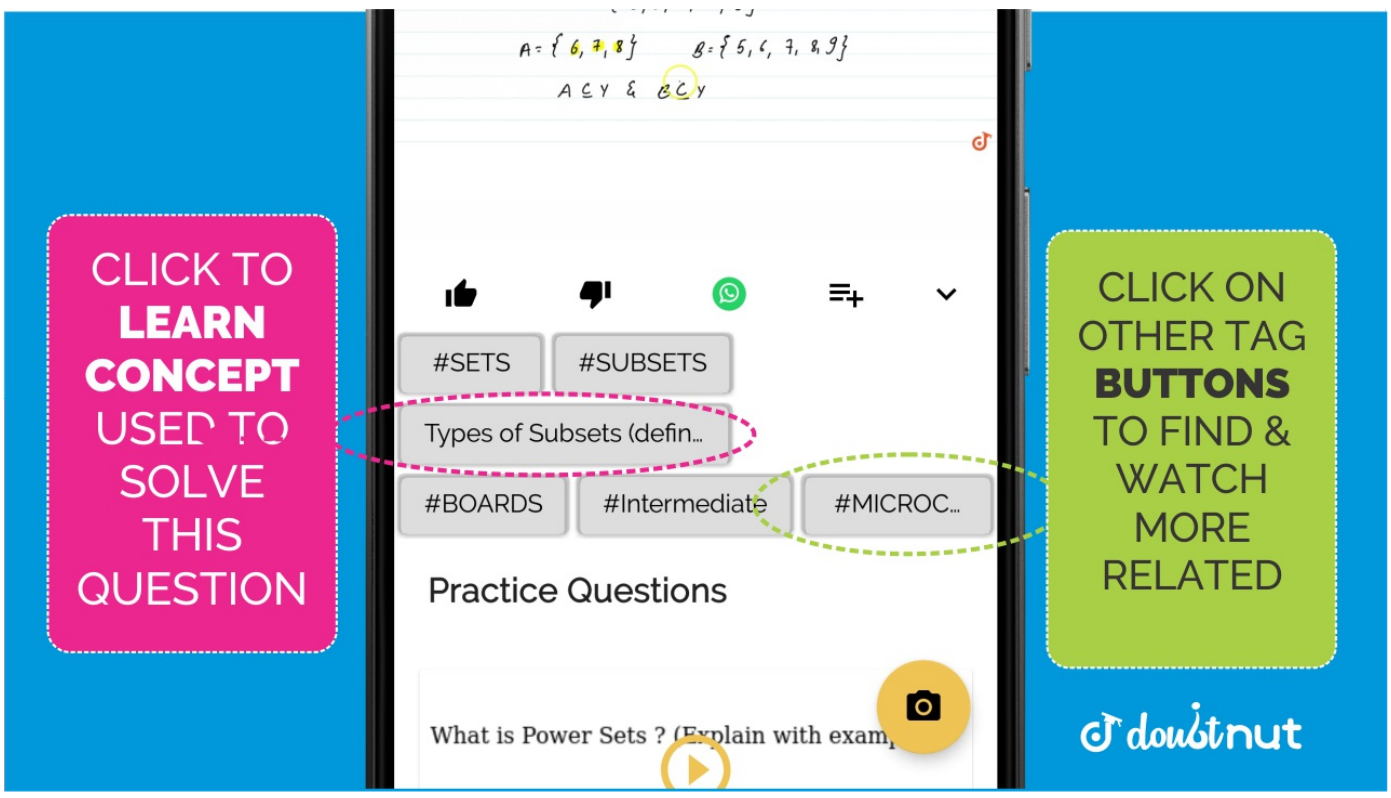
8	**3. INTERNAL AND EXTERNAL BISECTORS OF AN ANGLE OF A TRIANGLE** 1. The internal angle bisector of an angle of a triangle divide the opposite side internally in the ratio of the sides containgthe angle Click to LEARN this concept/topic on Doubtnut
9	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **3. INTERNAL AND EXTERNAL BISECTORS OF AN ANGLE OF A TRIANGLE** 2. If a line through one vertex of a triangle divides the opposite sides in the Ratio of other two sides; then the line bisects the angle at the vertex. Click to LEARN this concept/topic on Doubtnut
10	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **3. INTERNAL AND EXTERNAL BISECTORS OF AN ANGLE OF A TRIANGLE** 3. The external angle bisector of an angle of a triangle divides the opposite side externally in the ratio of the sides containing the angle. Click to LEARN this concept/topic on Doubtnut
11	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **4. MORE ON BASIC PROPORTIONALITY THEOREM** 1. The line drawn from the midpoint of one side of a triangle parallel to another side bisects the third side. Click to LEARN this concept/topic on Doubtnut
12	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **4. MORE ON BASIC PROPORTIONALITY THEOREM** 2. The line joining the mid-points of two sides of a triangle is parallel to the third side.

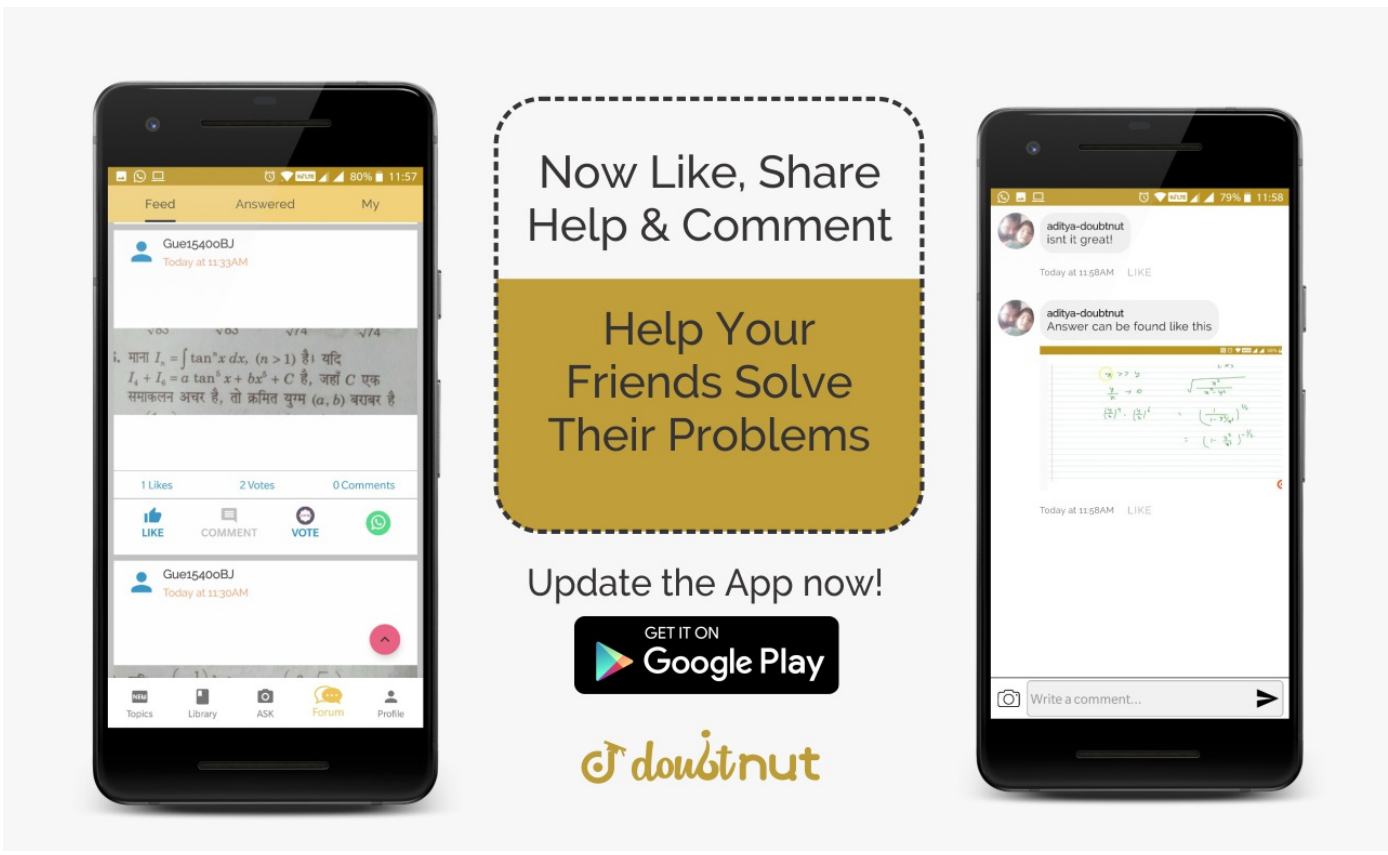
	Click to LEARN this concept/topic on Doubtnut
13	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **4. MORE ON BASIC PROPORTIONALITY THEOREM** 3. Prove that the diagonals of a trapezium divide each other proportionally. Click to LEARN this concept/topic on Doubtnut
14	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **4. MORE ON BASIC PROPORTIONALITY THEOREM** 4. If the diagonals of a quadrilateral divide each other proportionally; then it is a trapezium. Click to LEARN this concept/topic on Doubtnut
15	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **4. MORE ON BASIC PROPORTIONALITY THEOREM** 5. Any line parallel to the parallel sides of a trapezium divides the non-parallel sides proportionally. Click to LEARN this concept/topic on Doubtnut
16	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **4. MORE ON BASIC PROPORTIONALITY THEOREM** 6. If three or more parallel lines are intersected by two transversal; Prove that the intercepts made by them on tranversal are propotional. Click to LEARN this concept/topic on Doubtnut

17	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **5. CRITERIA FOR SIMILARITY OF TRIANGLES** 1. AAA Similarity Criterion : If two triangles are equiangular; then they are similar Click to LEARN this concept/topic on Doubtnut
18	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **5. CRITERIA FOR SIMILARITY OF TRIANGLES** 2. If two angles of one triangle are respectively equal to two angles of another triangle; then two triangles are similar. Click to LEARN this concept/topic on Doubtnut
19	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **5. CRITERIA FOR SIMILARITY OF TRIANGLES** 3. SSS Similarity Criterion : If the corresponding sides of two triangles are proportional;then they are similar Click to LEARN this concept/topic on Doubtnut
doubtnut पढ़ना हुआ आसान	
20	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **5. CRITERIA FOR SIMILARITY OF TRIANGLES** 4. SAS Similarity Criterion : If in two triangle; one pair of corresponding sides are proportional and the included angles are equal then two triangles are similar. Click to LEARN this concept/topic on Doubtnut
	CONCEPT FOR BOARDS || Chapter TRIANGLES **6. PROPERTIES OF SIMILAR TRIANGLE**

21	1. If two triangles are similar; prove that the ratio of the corresponding sides is same as the ratio of corresponding medians. Click to LEARN this concept/topic on Doubtnut
22	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **7. MORE ON CHARACTERISTICS PROPERTIES** 1. If two triangles are similar; prove that the ratio of the corresponding sides is same as the corresponding angle bisector segments. Click to LEARN this concept/topic on Doubtnut
23	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **7. MORE ON CHARACTERISTICS PROPERTIES** 2. If two triangles are similar; prove that the ratio of corresponding sides is equal to the ratio of corresponding altitudes. Click to LEARN this concept/topic on Doubtnut
	
	CONCEPT FOR BOARDS || Chapter TRIANGLES **7. MORE ON CHARACTERISTICS PROPERTIES** 3. If one angle of a triangle is equal to one angle of another triangle and bisector of

24	these equal angles divide the opposite side in the same ratio; prove that the triangles are similar. Click to LEARN this concept/topic on Doubtnut
25	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **7. MORE ON CHARACTERISTICS PROPERTIES** 4. If two sides and a median bisecting one of these sides of a triangle are respectively proportional to the two sides and corresponding median of another triangle; then triangle are similar. Click to LEARN this concept/topic on Doubtnut
26	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **7. MORE ON CHARACTERISTICS PROPERTIES** 5. If two sides and a median bisecting the third side of a triangle ar respectively proportional to the corresponding sides and median of the other triangle; then the two triangles are similar. Click to LEARN this concept/topic on Doubtnut
27	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **8. AREAS OF TWO SIMILAR TRIANGLES** 1. The ratio of area of Two similar triangles is equal to the ratio of the squares of any two corresponding sides. Click to LEARN this concept/topic on Doubtnut
doubtnut पढ़ना हुआ आसान	
28	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **8. AREAS OF TWO SIMILAR TRIANGLES** 2. The area of two similar triangles are in ratio of the squares of the corresponding

	altitudes. Click to LEARN this concept/topic on Doubtnut
29	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **8. AREAS OF TWO SIMILAR TRIANGLES** 3. The areas of the two similar triangles are in the ratio of the square of the corresponding medians. Click to LEARN this concept/topic on Doubtnut
30	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **8. AREAS OF TWO SIMILAR TRIANGLES** 4. The area of two similar triangle are in the ratio of the square of the corresponding angle bisector segments Click to LEARN this concept/topic on Doubtnut
31	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **8. AREAS OF TWO SIMILAR TRIANGLES** 5. If the area of two similar triangles are equal then the triangles are congruent. Click to LEARN this concept/topic on Doubtnut
doubtnut पढ़ना हुआ आसान	
32	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **9. PYTHAGORAS THEOREM** 1. PYTHAGORAS THEOREM : In a Right angled triangle; the square of hypotenuse is equal to the sum of the squares of the other two sides. Click to LEARN this concept/topic on Doubtnut

33	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **9. PYTHAGORAS THEOREM** 2. $\triangle ABC$ is an obtuse triangle; obtuse-angled at B. If $AD \perp CB$; prove that $(AC)^2 = (AB)^2$ $+ (BC)^2 + 2BC$ $. BD$ Click to LEARN this concept/topic on Doubtnut
34	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **9. PYTHAGORAS THEOREM** 3. In fig. $\angle B$ of $\triangle ABC$ is an acute angle and $AD \perp BC$; prove that $AC^2 = AB^2 + BC^2$ $- 2BC \times BD$ Click to LEARN this concept/topic on Doubtnut
35	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **9. PYTHAGORAS THEOREM** 4. Prove that in any triangle; the sum ant the squares of any two side is equal to twice the square of half of the third side together with twice the square of the median which bisects the third side. Click to LEARN this concept/topic on Doubtnut
doubtnut पढ़ना हुआ आसान	
	CONCEPT FOR BOARDS || Chapter TRIANGLES **9. PYTHAGORAS THEOREM**

36	5. Three times the sum of square of the sides of a triangle is equal to four times the sum of the square of the medians of the triangle. Click to LEARN this concept/topic on Doubtnut
37	**CONCEPT FOR BOARDS || Chapter TRIANGLES** **9. PYTHAGORAS THEOREM** 6. Converse of Pythagoras theorem : In a triangle; If the square of one side is equal to the sum of the squares of the other two sides., then the angle opposite to the side is a right angle. Click to LEARN this concept/topic on Doubtnut