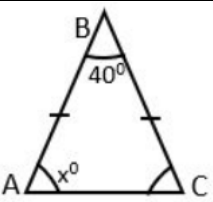
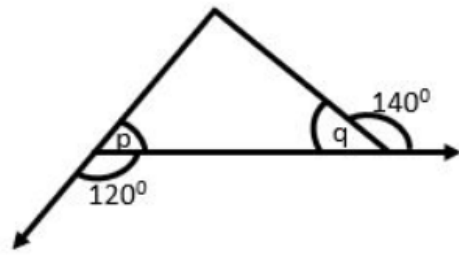
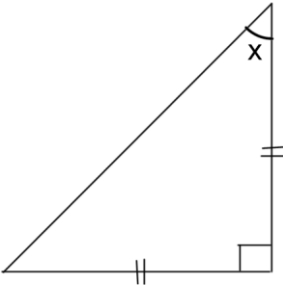
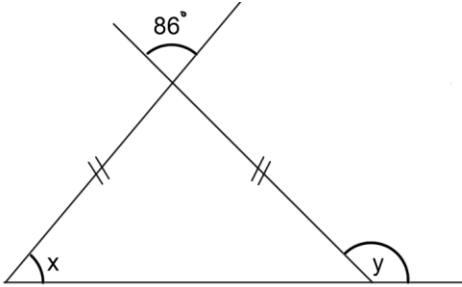
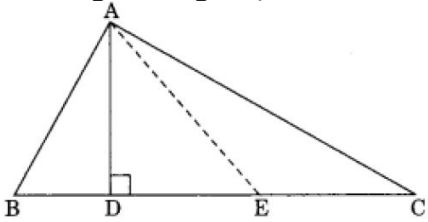
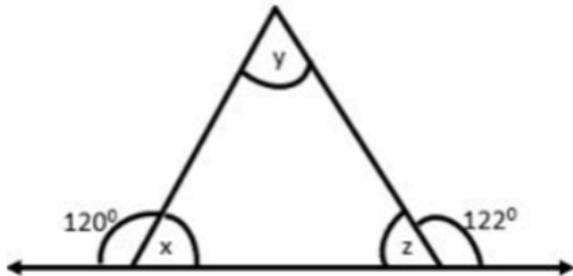
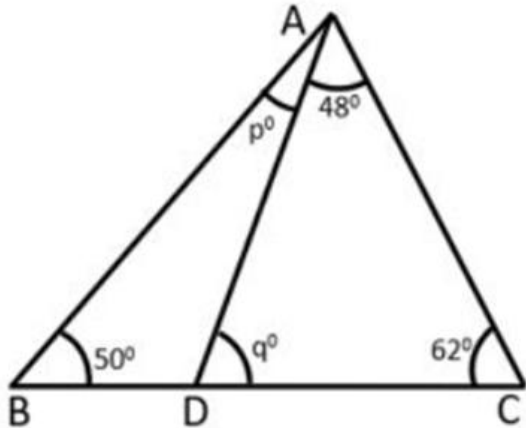
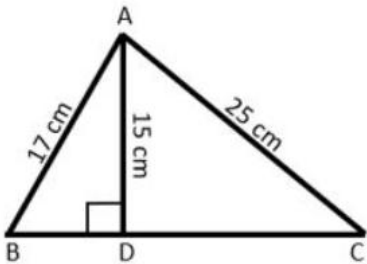


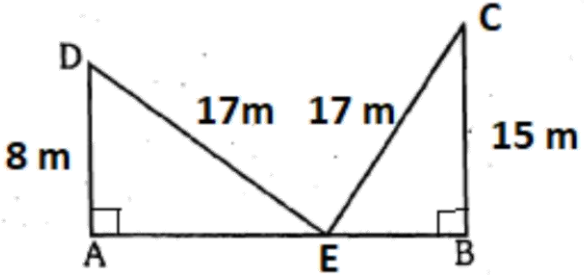
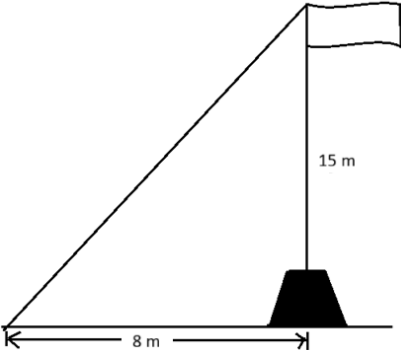
INDIAN SCHOOL AL WADI AL KABIR
Class VII, Mathematics
WORKSHEET: TRIANGLE AND ITS PROPERTIES-1 (2025-26)

Multiple Choice Questions

Q.1.	In a right-angled triangle, if one of the acute angle measures is 35° then the measure of the other acute angle is _____.							
	A	35°	B	45°	C	55°	D	65°
Q.2.	A triangle is not possible whose angles measure are:							
	A	$45^\circ, 45^\circ, 90^\circ$	B	$30^\circ, 70^\circ, 65^\circ$	C	$47^\circ, 33^\circ, 100^\circ$	D	$125^\circ, 35^\circ, 20^\circ$
Q.3.	In the given figure, the value of x is							
								
	A	60°	B	65°	C	80°	D	70°
Q.4.	In the given figure, the value of p and q is							
								
	A	$60^\circ, 40^\circ$	B	$40^\circ, 60^\circ$	C	$70^\circ, 30^\circ$	D	$60^\circ, 50^\circ$
Q.5.	The acute angles of right triangle are in the ratio 2 : 1. Then the measure of each of these angles are:							
	A	55° and 35°	B	50° and 40°	C	60° and 30°	D	45° and 45°
Q.6.	Mohini walks 120m due East and then 50m due North. How far is she from her starting point?							
	A	120 m	B	50 m	C	130 m	D	170 m
Q.7.	Which of the following statements is not correct?							
	a) The sum of any two sides of a triangle is greater than the third side. b) A triangle can have all its angles acute. c) A right-angled triangle cannot be isosceles. d) Difference of any two sides of a triangle is greater than the third side.							
	A	c and d	B	b and c	C	c and a	D	b and d

Q.8.	If the exterior angle of a triangle is 130° and its interior opposite angles are equal, then the measure of each interior opposite angle is							
	A	55°	B	65°	C	50°	D	60°
Q.9	In a triangle, the measure of two angles is 68° and 73° . Then the measure of third angle will be							
	A	39°	B	37°	C	41°	D	43°
Q.10	Which of the following can be the lengths of sides of a triangle?							
	A	3cm, 3cm, 7cm	B	2cm, 3cm, 7cm	C	6cm, 5cm, 7cm	D	3cm, 4cm, 5cm
	SOURCE BASED QUESTION: In Shyams room there were wall hangings in the below given shapes. <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Fig (a)</p> </div> <div style="text-align: center;">  <p>Fig (b)</p> </div> </div> <p>Based on the above figures, answer the following questions:</p>							
Q.11	In Fig (a) find the measure of the unknown angle x .							
Q.12	In Fig (b) find the measure of the unknown angle x .							
Q.13	In Fig (b) what would be the measure of angle y .							
	LONG ANSWER QUESTIONS:							
Q.14	The lengths of two sides of a triangle are 8 cm and 11 cm. Between which two numbers can length of the third side fall?							
Q.15	<p>In the given figure, name the median and the altitude if E is the midpoint of BC.</p> 							
Q.16	In the given figure, find the value of x , y and z .							

	
Q.17	A 25 m long ladder reaches a roof of 20 m high from the ground on placing it against the wall. How far is the foot of the ladder from the wall?
Q.18	Find the value of 'p' and 'q' in the given figure. 
Q.19	The measures of three angles of a triangle is 2:3:4. Find the measures of all angles of a triangle and also write the type of triangle formed.
Q.20	In the given figure, $\angle ADB = 90^\circ$, $AB = 17$ cm, $AC = 25$ cm and $AD = 15$ cm. find the value of BC. 
Q.21	The diagonals of a rhombus are 18 cm and 24 cm. Find the side and perimeter.
Q.22	The length of a rectangle is 24 cm and its diagonal is 25 cm. Find the perimeter of the rectangle.

Q.23	<p>A ladder of length 17 m reaches a window which is 8 m above the ground on one side of a street and at the same point it reaches a window 15 m high in a wall on opposite side. Find the width of the street. (CBQ)</p> 
Q.24	<p>CASE STUDY</p> <p>During a sports event, a banner is tied from the top of a 15 m high flagpole to a point on the ground 8 m away from the base.</p>  <ol style="list-style-type: none"> Find the length of the rope tied to the banner Verify whether 15m, 8m and 20 m forms the sides of a right-angled triangle. During a storm, another flagpole broke at a height of 10 m from the ground, and its top touches the ground at a distance of 24 m from the base. Find the height of the flagpole.

Answers

Q1.	C	Q2.	B	Q3.	D
Q4.	A	Q5.	C	Q6.	C
Q7.	A	Q8.	B	Q9.	A
Q10.	C	Q11.	45°	Q12.	47°
Q13.	133°	Q14.	3cm and 19 cm	Q15.	AE, AD
Q16.	$X=60^\circ, Y=62^\circ, Z=58^\circ$	Q17.	15m	Q18.	$q=70^\circ, p=20^\circ$
Q19.	$40^\circ, 60^\circ, 80^\circ$, acute angled	Q20.	28cm	Q21.	15cm, 60cm
Q22.	62cm	Q23.	23m	Q24.	17m, no, 36m