INDIAN SCHOOL AL WADI AL KABIR
Class VIII, Mathematics
MCQ WORKSHEET (2026-27)
THE BAUDHAYANA-PYTHAGORAS THEOREM

Multiple Choice Questions

Q.1 A right-angled triangular garden has two perpendicular sides measuring 12 m and 16 m. Then the length of the diagonal boundary is:

	A	18 m	B	20 m	C	22 m	D	24 m

Q.2 The hypotenuse of an isosceles right-angled triangle is 10 cm. The length of each of its equal sides is:

	A	$5\ cm$	B	$10\sqrt{2}\ cm$	C	$5\sqrt{2}\ cm$	D	$20\ cm$

Q.3 Which of the following sets forms a Baudhayana triplet?

	A	10, 24, 25	B	11, 60, 61	C	12, 16, 18	D	15, 20, 24

Q.4 The area of an equilateral triangular signboard with each side measuring 8 cm is:

	A	$32\sqrt{3}\ cm^2$	B	$16\sqrt{3}\ cm^2$	C	$8\sqrt{3}\ cm^2$	D	$64\sqrt{3}\ cm^2$

Q.5 An engineer is installing a vertical antenna on a building. A supporting cable is fixed from the top of the antenna to a point on the ground 9 m away from its base. If the cable is 41 m long, how high is the antenna?

	A	40 m	B	39 m	C	38 m	D	42 m

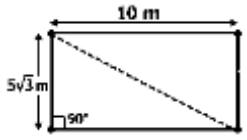
Q.6 The diagonal of a square-shaped tile is 14√2 cm. Then the length of each side of the tile is:

	A	28 cm	B	7 cm	C	21 cm	D	14 cm

Q.7 A metal decorative piece is in the shape of a rhombus. Its diagonals measure 20 cm and 48 cm. A manufacturer wants to attach a border along one side. What should be the length of the border required for one side?

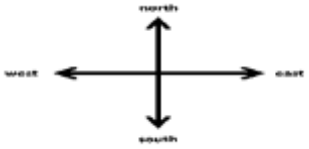
	A	25 cm	B	26 cm	C	28 cm	D	24 cm

Q.8 A rectangular classroom is 10 m long and $5\sqrt{3}$ m wide. What is the length of its diagonal?

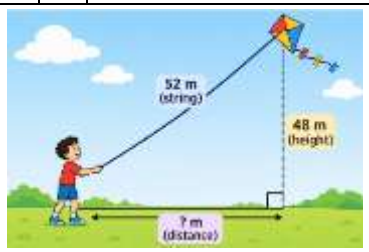


	A	$5\sqrt{7}\ m$	B	$10\sqrt{2}\ m$	C	$12\ m$	D	$5\sqrt{13}\ m$

Q.9 A person walks 15 m towards the west and then 20 m towards the south. What is the shortest distance between the starting and ending positions?



	A	30 m	B	20 m	C	25 m	D	35 m

Q.10	A square-shaped floor design is divided into two identical triangular sections by drawing one diagonal. If the area of each triangular section is 200 cm², what is the area of the entire square?							
	A	$100\ cm^2$	B	$200\ cm^2$	C	$300\ cm^2$	D	$400\ cm^2$
Q.11	An isosceles right-angled triangular piece of cloth has each of its equal sides measuring 9 cm. Its hypotenuse is:							
	A	$9\sqrt{2}\ cm$	B	$9\ cm$	C	$18\sqrt{2}\ cm$	D	$18\ cm$
Q.12	If (5, 12, 13) is a Baudhayana triplet, which of the following will also form a Baudhayana triplet?							
	A	(10, 24, 26)	B	(16, 30, 35)	C	(15, 30, 39)	D	(20, 36, 40)
Q.13	The diagonals of a rhombus measure 18 cm and 24 cm. What is the length of each side of the rhombus?							
	A	12 cm	B	18 cm	C	13 cm	D	15 cm
Q.14	A kite is flying at a height of 48 m above the ground. The length of the taut string is 52 m. How far is the person holding the string from the point directly below the kite? 							
	A	18 m	B	20 m	C	24 m	D	16 m
Q.15	**Case study: The Adventure Park**  An adventure park is constructing a zipline between two platforms. The higher platform is 36 m above the ground, while the lower platform is 12 m above the ground. The horizontal distance between the two platforms is 32 m. The designers want to calculate the straight-line distance between the platforms to determine the length of the zipline. a) What is the vertical difference in height between the two platforms? b) Calculate the length of the zipline. c) Do the three measurements obtained in the situation form a Baudhayana triplet? Justify your answer. d) If the zipline is made 5 m longer than the calculated distance for installation purposes, what should be its total length?							

ANSWERS

1) B	2) C	3) B	4) B	5) A	6) D	7) B	8) A
9) C	10) D	11) A	12) A	13) D	14) B	15) a)24 m b) 40 m c) Yes d) 45 m	