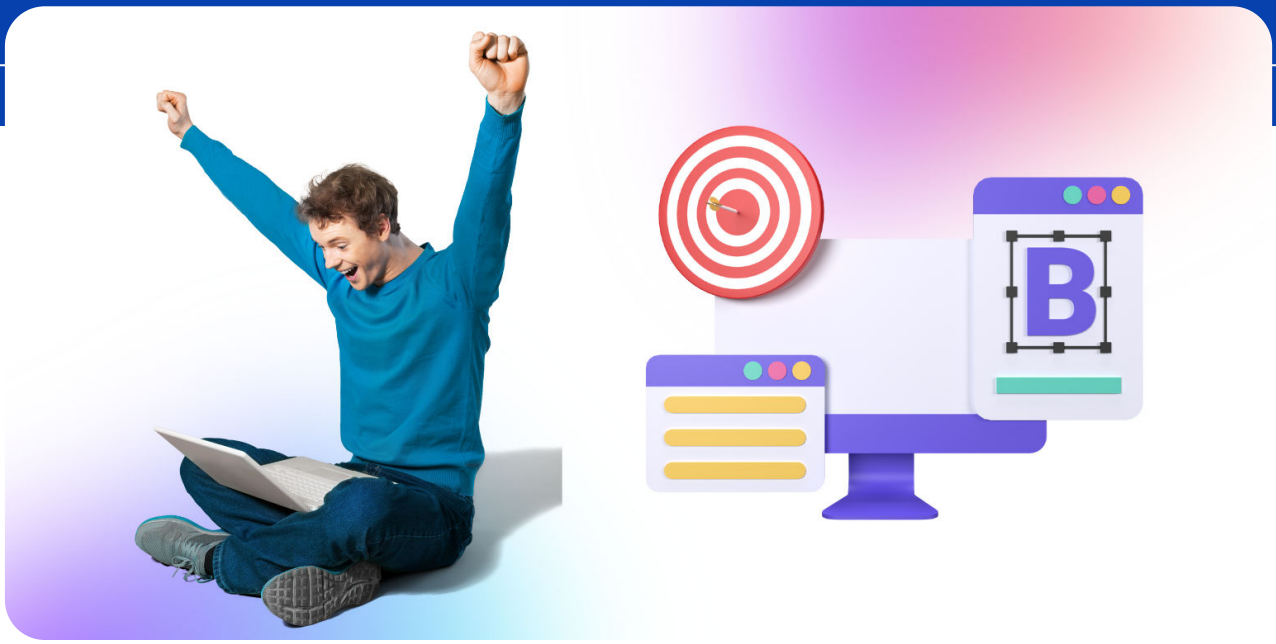
Edulyte

CENTROID OF A TRAPEZOID FORMULA

The trapezoids are essential subjects of study in mathematics and geometrical calculations as they help the students understand the fundamental concepts of geometry, such as angles and parallel lines, and they directly relate to quadrilaterals.

Read more



Q1: What is the defining characteristic of a trapezoid?

A: Four equal sides
B: Four right angles
C: Two parallel sides
D: No parallel sides

Q2: What is the formula for finding the centroid of a trapezoid?

A: [h/2, {(b + 2a)/ 3 (a + b)}× h]
B: $(x_1 + x_2 + x_3) / 3, (y_1 + y_2 + y_3) / 3$
C: $(x_1 + x_2) / 2, (y_1 + y_2 + y_3) / 3$
D: $(x_1 + x_2 + x_3) / 3, (y_1 + y_2) / 2$

Q3: What is the formula for calculating the area of a trapezoid with bases 'a' and 'b' and height 'h'?

A: A = (1/2) * (a + b) * h
B: A = (a + b) / 2 * h
C: A = (a - b) / 2 * h
D: A = (a * b) / 2 * h

Q4: What will be the centroid of a trapezoid with a is 12 cm, b is 5 cm, and h is 5 cm?

A: 2.84 cm^2
B: 2.75 cm
C: 2.90 cm
D: 2.84 cm

Q5: What is the perimeter of the trapezoid with sides of 3 cm, 5 cm, 9 cm, and 11 cm?

A: 28 cm^2
B: 20 cm
C: 28 cm
D: 20 cm^2

Q6: What will be the centroid of a trapezoid with a is 5 cm, b is 3 cm, and h is 10 cm?

A: 4.40 cm
B: 4.58 cm
C: 4.58 cm²
D: 4.70 cm

Q7: Which shape does a trapezoid have a similarity with?

A: Parallelogram
B: Triangle
C: Rectangle
D: Square

Q8: What is the other name of a trapezoid?

A: Trapeze
B: Triazium
C: Trazidum
D: Trapezium

Q9: What is the perimeter of the trapezoid with sides 13 cm, 15 cm, 7 cm, and 3 cm?

A: 38 cm²
B: 38 cm
C: 20 cm
D: 20 cm²

Q10: What will be the centroid of a trapezoid with a is 8 cm, b is 10 cm, and h is 9 cm?

A: 4.99 cm
B: 4.33 cm²
C: 4.33 cm
D: 4.25 cm

Answers

Q1: C - Two parallel sides

Q2: A - [h/2, {(b + 2a)/ 3 (a + b)}× h]

Q3: B - A = (a + b) / 2 * h

Q4: D - 2.84 cm

Q5: C - 28 cm

Q6: B - 4.58 cm

Q7: A - Parallelogram

Q8: D - Trapezium

Q9: B - 38 cm

Q10: C - 4.33 cm