

Perimeter and Area

About These Problems

The perimeter of a polygon is the sum of all its sides. The area of a polygon is how much cross sectional space it takes up in a two dimensional plane. Usually you find the area of a 4-sided polygon by taking its average base and multiplying it by height. Triangles' area is half the base times height.

Question. What is the perimeter and area of a right angle triangle who's shorter sides are 6 and 8?

- 1. Perimeter = 24 Area = 48
- 2. Perimeter = 24 Area = 24
- 3. Perimeter = 20 Area = 12
- 4. Perimeter = 20 Area = 16
- 5. Perimeter = 24 Area = 34

Answer. 2: If the triangle is a right triangle, using the Pythagorean theorem we can deduce that the longest side (hypotenuse) is 10.

$$(6^2 + 8^2)^{(1/2)} = 10$$

Perimeter =
$$6 + 8 + 10 = 24$$
.

Area =
$$(b * h)/2 = 8*6/2 = 24$$