Area of a Triangle

	Alea ol a mangle
. Choose the Correc	t Answer:
1. What is the form	ula for the area of a triangle?
a) Base × Height	b) $\frac{1}{2}$ × Base × Height
c) Side × Side	d) Length + Breadth
2. If the base of a tri	iangle is 10 cm and the height is 5 cm, t
a) 25 cm²	b) 50 cm²
c) 15 cm²	d) 30 cm²
3. A triangle with ba	ase 12 cm and height 6 cm has an area o
a) 72 cm ²	b) 36 cm ²
c) 24 cm ²	d) 18 cm ²
4. If a triangle has a	n area of 40 cm ² and a height of 8 cm, w
a) 5 cm	b) 10 cm
	u) io cin
a) Any of the three	e sides
b) The longest side	e only
c) A perpendicular	r line from vertex to base
d) Only the base it	tself
Write the Missing	Terms to Complete the Sentences:
1. The area of a triar	ngle is calculated using the formula
2. A triangle with ba	se 7 cm and height 4 cm has an area of
3. Area is always me	asured in units.
4. If the area of a tria	angle is 30 cm ² and height is 6 cm, then ba
5. The perpendicular	r drawn from the vertex to the base is call
Figure out the answ	wers to these questions:
1. A triangular field h	has a base of 20 m and a height of 12 m. F
2. The height of a tr triangle?	riangle is 9 cm and its base is 10 cm. Wh

- 3. A triangle has an area of 56 cm². If the base is 14 cm, what is the height?
- 4. The area of a triangle is 32 cm^2 . If the height is 8 cm, find the base.

- 5. A triangular banner has a base of 16 cm and a height of 5 cm. What is its area?
- 6. Find the area of a triangle whose base and height are 6.2 cm and 4.5 cm respectively.
- 7. A triangle and a rectangle have the same base and height. If the area of the rectangle is 48 cm², what is the area of the triangle?
- 8. The area of a triangle is 84 cm². If its height is twice the base, find the base and height.

D. Mark each sentence with a True (\checkmark) or False (X):

- 1. The area of a triangle is always half the product of its base and height. _____
- 2. A triangle cannot have a height greater than its base. _____
- 3. The area of a triangle with base 0 cm is also 0 cm².
- 4. Height and base of a triangle must be the same to find the area.
- 5. A triangle with base 10 cm and height 0 cm will have an area of 0 cm².

E. Challenge yourself with these questions:

- 1. A triangle has a height of 7.5 cm and a base of 8 cm. Find its area.
- 2. Convert an area of 0.5 m² of a triangle into cm².
- 3. A triangular plot has an area of 225 m². Its height is 15 m. Find its base.
- 4. Find the area of a triangle whose base is a mixed number $3\frac{1}{2}$ m and height is $2\frac{1}{4}$ m.
- 5. The length of the base of a triangle is 12 cm and its area is 90 cm². What is the height?

F. Find the area of each of the following triangles.

