

15 May 2017

Area Warmup Problems

1. Find the number of square centimeters in the area of a triangle with a base of 10 centimeters and an altitude of 5 centimeters.

2. The area of a triangle is 24 square centimeters and the base measures 6 centimeters. Find the number of centimeters in the measure of the altitude to that base.

3. The area of a triangle is 40 square centimeters. If the base of the triangle is 10 centimeters, find the number of centimeters in the height.

4. The base of a triangle is 4 units more than the height. The area of the triangle is 48 square units. If the height is represented by x , which equation could be used to find the measure of the height of the triangle?

(1) $x(x + 4) = 48$	(2) $\frac{1}{2}x(x + 4) = 48$
(3) $\frac{1}{2}(2x + 4) = 48$	(4) $\frac{1}{2}x(x - 4) = 48$

5. What is the area of the triangle whose vertices are (3,1), (7,1), and (6,4)?

6. In the accompanying diagram, \overleftrightarrow{AOB} is a straight line, $m\angle AOD = 3x - 12$, and $m\angle BOD = x$. What is the value of x ?

