

# 9.4 Puzzle Time

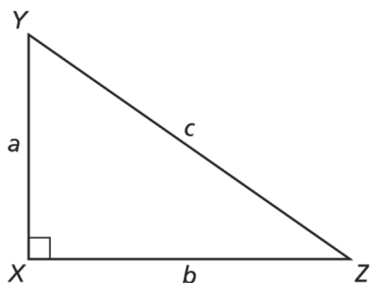
## What Exam Does An Exterminator Have To Take?

Write the letter of each answer in the box containing the exercise number.

**Complete the sentence.**

1. A(n) \_\_\_\_\_ of the lengths of two sides in a right triangle is called a trigonometric ratio.
2. The tangent ratio is a(n) \_\_\_\_\_ for acute angles that involves the lengths of the legs of a right triangle.
3. The angle that an upward line of sight makes with a line drawn horizontally is called the angle of \_\_\_\_\_.
4. The \_\_\_\_\_ is the ratio of the leg opposite a given angle to the leg adjacent to the given angle in a right triangle.

**Use the diagram. Round your answer to the nearest tenth.**



5.  $a = 10$ ,  $b = 15$ ,  $c = 5\sqrt{13}$ ; Find the tangent of  $\angle Z$ .
6.  $a = 10$ ,  $b = 15$ ,  $c = 5\sqrt{13}$ ; Find the tangent of  $\angle Y$ .
7.  $a = 18$ ,  $m\angle Y = 42^\circ$ ; Find  $b$ .
8.  $b = 22$ ,  $m\angle Z = 30^\circ$ ; Find  $a$ .
9.  $b = 28$ ,  $m\angle Y = 64^\circ$ ; Find  $a$ .

### Answers

- O. geometric ratio
- T. tangent
- A. 0.7
- N. side
- P. ratio
- T. hypotenuse
- S. 13.7
- H. 1.1
- E. 0.1
- S. trigonometric ratio
- E. 1.5
- R. 1.6
- T. elevation
- U. 22
- T. 16.2
- B. 28
- S. depression
- E. 12.7

5		1	8	2	3		7	6	9	4
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