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Writing Sample

Extract from web-based training curriculum (narration script) developed for
TechCoaches Instructional Systems Design

1 When we first encounter mathematical functions they are defined in simple, direct

2 terms. The common trigonometric functions, for example, are defined with respect

3 to the right triangle. Remember that a right triangle is a triangle in which one angle

4 is a right angle…that is, a ninety-degree angle. The relation between the sides and

5 angles of a right triangle is the basis for trigonometry.

6

7 So let's draw a right triangle. This is the ninety-degree or right angle.

8

9 The side opposite the right angle is called the hypotenuse. Let's label the

10 hypotenuse as side C in our figure. The sides adjacent to the right angle are called

11 legs. Side [A] may be identified as the side adjacent to angle [B] and opposed to, or

12 opposite, angle [A], while side [B] is the side adjacent to angle [A] and opposed to

13 angle [B].

14

15 If the lengths of all three sides of a right triangle are integers, the triangle is called a

16 Pythagorean triangle and its side lengths are collectively known as a Pythagorean

17 triple.

18

19 Let's talk about the Pythagorean theorem. This is important because you'll see it in

20 many applications of math.

21

22 The Pythagorean theorem says that in any right triangle…the area of the square

23 whose side is the hypotenuse…again…the side opposite the right angle…is equal to

24 the sum of the areas of the squares whose sides are the two legs, which are the two

25 sides that meet at a right angle. We can say…in equation form…as [A]-squared plus

26 [B]-squared equals [C]-squared where [C] is the length of the hypotenuse, and [A]

27 and [B] are the lengths of the remaining two sides.