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| **Exploring Relationships in Right Triangles**  |
| Identifies hypotenuse of a right triangleThe hypotenuse is the longest side of a right triangle and is opposite the 90° angle.  | Describes the Pythagorean relationship*a*2 + *b*2 = *c*2In a right triangle, the sum of the areas of the two smaller squares equals the area of the larger square. | Applies the Pythagorean relationship to determine the length of the hypotenuse of a right triangle Determine the length of the hypotenuse. *a*2 + *b*2 = *c*2  0.32 + 0.42 = *c*2 0.09 + 0.16 = *c*2 *c*2 = 0.25 *c* = 0.5The hypotenuse is 0.5 km. | Identifies a problem involving the application of the Pythagorean relationship and uses the relationship to find an unknown hypotenuseA top of a slide is 6 m above the ground and the base of the slide is 4.5 m along the ground. How long is the slide?The length of the slide represents the hypotenuse of a right triangle. I can use the Pythagorean relationship. *a*2 + *b*2 = *c*2  62 + 4.52 = *c*2 36 + 20.25 = *c*2  *c*2 = 56.25 *c* = $\sqrt{56.25}$ *c* = 7.5The slide is 7.5 m long. |
| **Observations/Documentation** |
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