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| **Exploring Relationships in Right Triangles** | | | |
| Identifies hypotenuse of a right triangle  The hypotenuse is the longest side of a right triangle and is opposite the 90° angle. | Describes the Pythagorean relationship    *a*2 + *b*2 = *c*2  In 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* = 0.5  The hypotenuse is 0.5 km. | Identifies a problem involving the application of the Pythagorean relationship and uses the relationship to find an unknown hypotenuse  A 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* =  *c* = 7.5  The slide is 7.5 m long. |
| **Observations/Documentation** | | | |
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