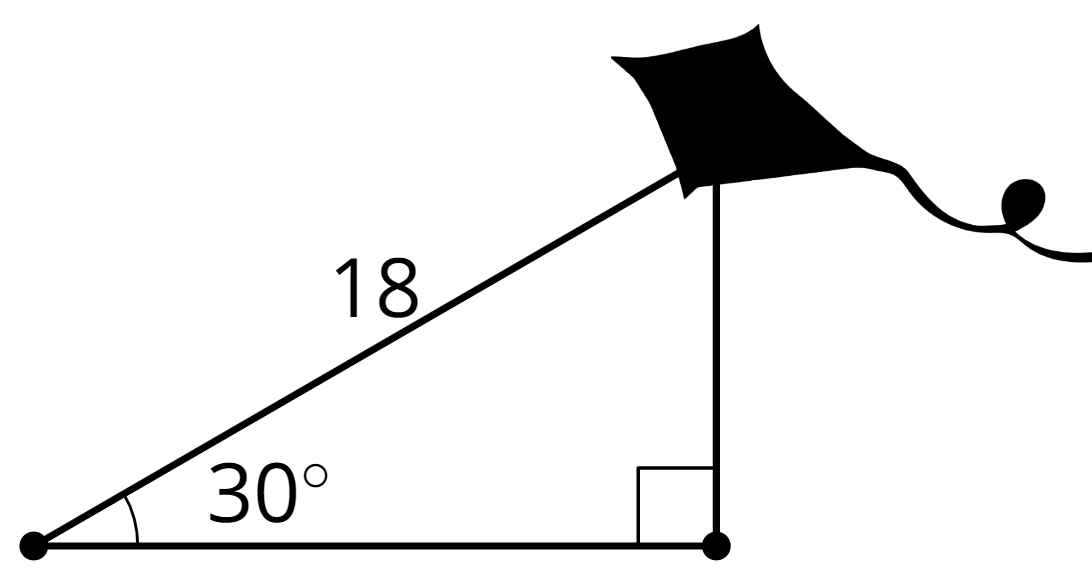
### Lesson 5 Practice Problems

1. A triangle has sides with lengths 8, 15, and 17.
   1. Verify this is a Pythagorean triple.
   2. Approximate the acute angles in this triangle.
2. Kiran is flying a kite. He gets tired, so he stakes the kite into the ground. The kite is on a string that is 18 feet long and makes a 30 degree angle with the ground. How high is the kite?

* 

1. Triangle has a right angle at . Select **all** measurements which would mean it has a hypotenuse with a length of 10 units.

* 
  1. Angle is 20 degrees,  is 2 units
  2. is 7 units,  is 3 units
  3. Angle is 50 degrees, is 4 units
  4. Angle is 30 degrees, is 5 units
  5. is 8 units, is 6 units

1. What is a reasonable approximation for angle if the ratio of the adjacent leg divided by the hypotenuse is 0.45?
   1. 27 degrees
   2. 30 degrees
   3. 60 degrees
   4. 63 degrees

* (From Unit 4, Lesson 4.)

1. Estimate the values to complete the table.

* 

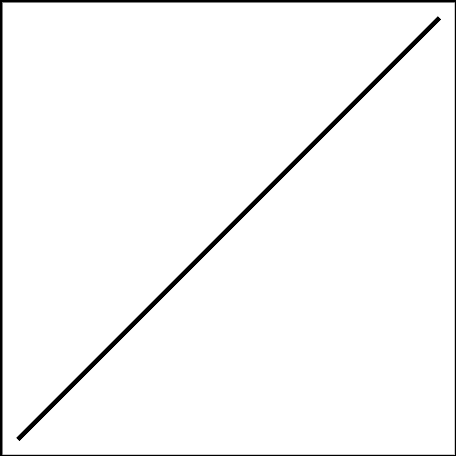
|  |  |  |  |
| --- | --- | --- | --- |
| * angle | * adjacent leg hypotenuse | * opposite leg hypotenuse | * opposite leg adjacent leg |
|  | * 0.31 | * 0.95 | * 3.1 |
|  |  |  |  |

* (From Unit 4, Lesson 4.)

1. What is the length of side ?

* 
* (From Unit 4, Lesson 3.)

1. What is the length of the square’s side?

* 
  1. 3 units
  2. units
  3. units
  4. 12 units

1. Find the lengths of segments  and . Then check your answers using a different method.

* 
* (From Unit 3, Lesson 13.)



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