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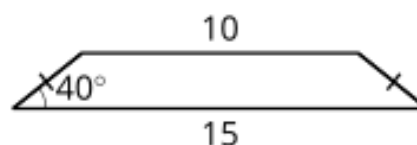
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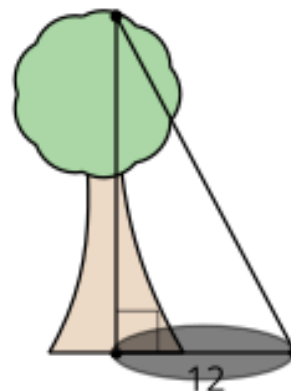
## Curated Practice Problem Set

### Unit 4 Lesson 10 Cumulative Practice Problems

1. *Technology required.* Find the area of the isosceles trapezoid.



2. *Technology required.* The sun is 62 degrees above the horizon. A tree casts a shadow that is 12 feet long. How tall is the tree?



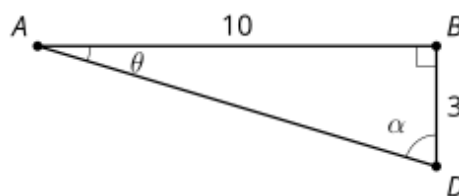
3. *Technology required.* A plane leaves the ground with an elevation angle of 6 degrees. The plane travels 10 miles horizontally.
  - a. How high is the plane at the time?
  - b. What is the distance of the plane's path?

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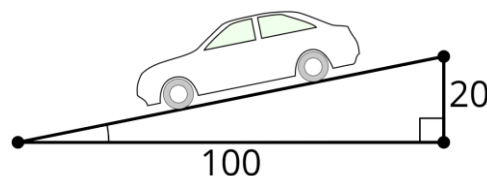
4. *Technology required.* Find the missing measurements.



(From Unit 4, Lesson 9.)

5. *Technology required.* Ramps in a parking garage need to be steep. The maximum safe incline for a ramp is 8.5 degrees.

Is this a safe ramp? Explain or show your reasoning.



(From Unit 4, Lesson 9.)

6. Select **all** true equations.

- A.  $\cos(37) = \sin(53)$
- B.  $\tan(37) = \tan(53)$
- C.  $\sin(37) = \cos(53)$
- D.  $\sin(37) = \sin(53)$
- E.  $\cos(\theta) = \sin(90 - \theta)$

(From Unit 4, Lesson 8.)

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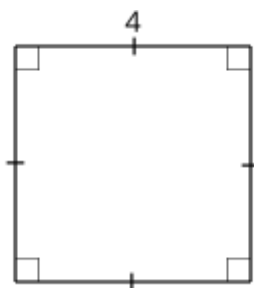
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7. *Technology required.* Clare is flying a kite. She gets tired, so she stakes the kite into the ground. The kite is on a string that is 30 ft long and makes a 27 degree angle with the ground. How high is the kite?

- A. 30 ft
- B. 13.6 ft
- C. 26.7 ft
- D. 15.3 ft

(From Unit 4, Lesson 7.)

8. What is the length of the diagonal?



(From Unit 4, Lesson 2.)