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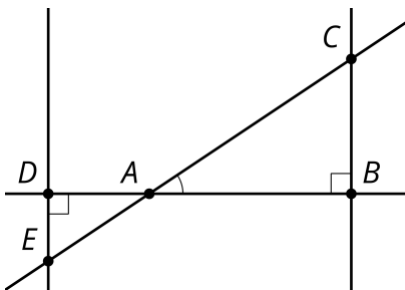
PERIOD _____

Unit 4 Pre-Assessment

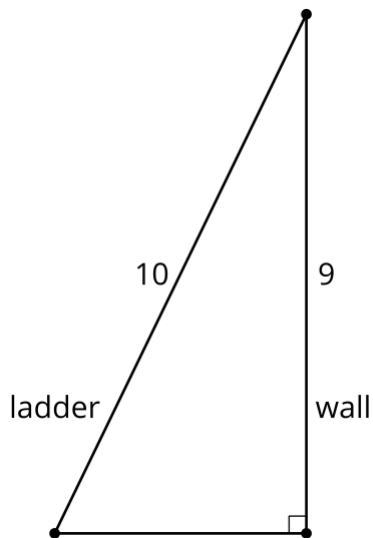
Right Triangle Trigonometry: Check Your Readiness

You may use a scientific calculator and your reference chart. Round side lengths to the nearest tenth.

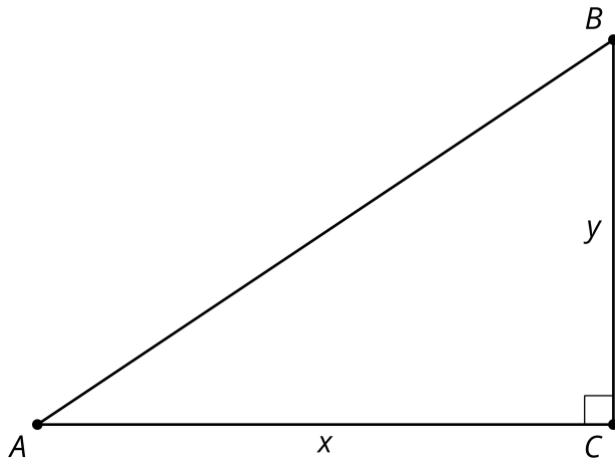
1. Which angle is complementary to angle BAC ?



- a. angle ACB
 - b. angle CAD
 - c. angle CBA
 - d. angle DAE
2. A 10-foot tall ladder is placed against a wall so that the top of the ladder is 9 feet above the ground. How far is the base of the ladder from the base of the wall along the ground? Explain or show your reasoning.

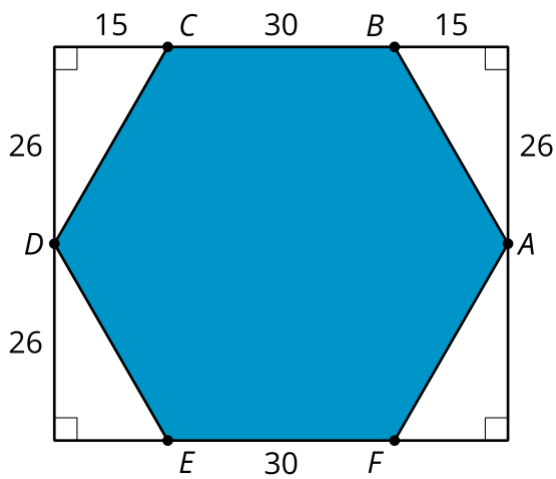


3. Clare and Diego each use a ruler to try to determine the slope of line AB in this right triangle. Clare says the slope is a ratio of y to x of 2.8:4.1. Diego says the slope is 0.67.



The exact slope is $\frac{2}{3}$. Was either student close to the exact value of the slope? Explain or show your reasoning.

4. What is the area of regular hexagon $ABCDEF$? Explain or show your reasoning.



5. Select **all** quantities that equal π .
- a. the circumference of a circle of radius 1
 - b. the circumference of a circle of diameter 1
 - c. the diameter of a circle of radius 1
 - d. the diameter of a circle of circumference 1
 - e. the area of a circle of radius 1
 - f. the area of a circle of diameter 1
 - g. the constant of proportionality relating the diameter of a circle to its radius
 - h. the constant of proportionality relating the diameter of a circle to its circumference

6. Solve each equation.

$$\frac{x}{7} = 0.4$$

$$\frac{7}{y} = 0.4$$