Pythagorean & Irrational Quiz Prep

<u>Directions</u>: Do your best to practice all Desmos topics. Show work when requested.

1.) Determine if the following are rational or irrational. Circle your choice for each.

 $\sqrt{50}$

 5π

0.435

Rational

Rational

Rational

Rational

Rational

Irrational

Irrational

Irrational

Irrational

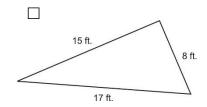
Irrational

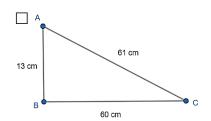
Pythagorean Theorem



$$c^2 = a^2 + b^2$$

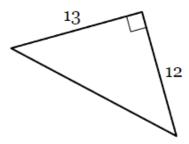
Determine which of the following are right triangles. Select all that apply and justify your choices. 2.)



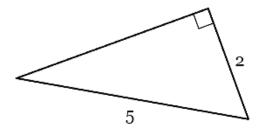


32, 60,

3.) Calculate the missing side of the right triangle shown below. Round your answer to the **nearest tenth**.

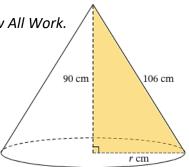


4.) Calculate the missing side of the right triangle shown below. Round your answer to the **nearest hundredth**.



5.) Carla wants to calculate the radius of the cone.

Use the Pythagorean Theorem to help her determine the radius. Show All Work.



6.) Triangle ABC is a right triangle with a right angle at vertex B. Side AB has a length of 24 inches and side BC has a length of 10 inches. What is the length, in inches, of side CA? Justify your answer.