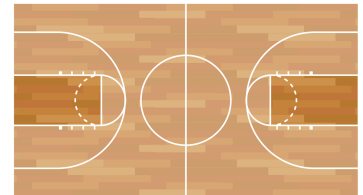


Name: \_\_\_\_\_

# Pythagorean Theorem Word Problems

1.) What is the length of the hypotenuse of a right triangle whose legs measure 36 meters and 48 meters (to the nearest meter)?

2.) A rectangular basketball court is 94 feet long. If the length of the diagonal that extends from one corner of the court to the opposite corner of the court is 106 feet, how wide is the court (to the nearest foot)?



3.) The bottom of a ladder is placed 9 away from the base of a wall. If the ladder is 15 feet long, how high up the wall is the top of the ladder (to the nearest foot)?

4.) Josie is fencing off half of her yard to protect her pet ducks. Her backyard is rectangular with a width of 24 yards and a length of 45 yards. If she plans on building a fence that stretches from one corner of her yard to the opposite corner of her yard, how long will the fence be (to the nearest yard)?



## **ANSWER KEY**

**1.) 60 meters**

**2.) 49 feet**

**3.) 12 feet**

**4.) 51 yards**