

The basketball coach is refurbishing the outdoor courts at his school and is wondering if the height of the goals is correct. The regulation height is 10 feet, measured from the ground to the rim. One afternoon the gym teacher measures his own shadow at 5 feet long and the shadow of the basketball goal (to the rim) as 8 feet long. If the gym teacher is 6 feet tall, is the basketball goal regulation height? Show all of your work and explain your answer.

