

MATH 111: QUIZ #1

1. Does there exist a one-to-one correspondence between the set of rational numbers and the set of real numbers? (This is a yes or no question. You do not need to justify your answer.)
2. Carefully state the Pythagorean theorem.
3. If a right triangle has hypotenuse of length 17 and one leg of length 15, how long is its other leg?
4. Which number is given the name φ , the Golden Ratio? (Give an exact answer, not an approximate one.)
5. What is a Golden Rectangle?