

History of Mathematical Ideas

Quiz 8

Name: _____

You have 15 minutes to complete this quiz. If you have a question raise your hand and remain seated. In order to receive full credit your answer must be **complete**, **legible** and **correct**. Show your work, and give adequate explanations.

1.

- (a) Write out the correct way to read “ $a \equiv b \pmod{c}$ ”.

a is congruent to b modulo c

- (b) What is the latin word that means “a small measure”?

modulus

2. Is the following system solvable for every a and b ? Explain.

$$\begin{aligned}x &\equiv a \pmod{b} \\x &\equiv b \pmod{a}\end{aligned}$$

Yes, $x = a + b$ is a solution.