

Quiz 1

Number theory

Deadline	Monday, 23 September 2019 at 4:00PM
Latest Submission	Sunday, 22 September 2019 at 8:39PM
Raw Mark	5.00/5.00 (100.00%)
Late Penalty	N/A
Final Mark	5.00/5.00 (100.00%)

Question 1 (1 mark)

True or false:

For all $x, y, z \in \mathbb{Z}$: if $x|y$ and $y|z$ then $x|z$?

(a) <input checked="" type="radio"/>	True
(b) <input type="radio"/>	False

✓ Your response was correct.

Mark: 1.00

Question 2 (1 mark)

What is $7^5 \% 9$?

4

✓ Your response was correct.

Mark: 1.00

Question 3 (1 mark)

True or false:

For all $m, n \in \mathbb{N}_{>0}$ and all $a, b \in \mathbb{Z}$: if $a \equiv b \pmod{m}$ and $a \equiv b \pmod{n}$ then $a \equiv b \pmod{mn}$

(a) <input type="radio"/>	True
(b) <input checked="" type="radio"/>	False

✓ Your response was correct.

Mark: 1.00

Question 4 (1 mark)

How many integers in $[-10, 10]$ are co-prime with 7?

18

✓ Your response was correct.

Mark: 1.00

Question 5 (1 mark)

What is $\gcd(288, 396)$?

36

✓ Your response was correct.

Mark: 1.00