MATH – PLAP 8th – Week 2

7 marks from 7 questions

Question 1

$x = \sqrt[3]{64}$

$y = \sqrt{x}$

y = [____]

Question 2

$3^3 \times 5^3 = 3375$

Use this fact to find the cube root of 3375.

[____]

Question 3

Is the following statement true or false?

The square root of a rational number is always an integer.

a. True

b. False

Question 4

Which two numbers are missing from the sequence:

1024, ..., 256, 128, ..., 32, 16, 8, 4, 2, 1?

a. ○ 2^8 and 2^6
b. ○ 2^9 and 2^5
c. ○ 2^8 and 2^5
d. ○ 2^9 and 2^6

Question 5

The first three terms of a number sequence are {1, 3, 27}. The sequence is built up in the following way:

Term 1 = 3^0

Term 2 = $3^0 \times 3^1$

Term 3 = $3^0 \times 3^1 \times 3^2$

The fourth term of the sequence is [____].

Question 6

$6^3 \div 6^3 =$

a. ○ $6^1 = 6$
b. ○ $6^0 = 1$
c. ○ $6^6 = 46\ 656$
d. ○ $6^9 = 10\ 077\ 696$

Question 7

Enter the missing index.

$4^8 \times 4^5 \div 4^6 = 4^{\boxed{}}$