

MAT 120

Quiz 1

Fall 2020

1. Which of the following are integers?

i) $(1 - \sqrt{-5})(1 + \sqrt{-5})$

ii) $.99\dot{9}$ (repeating)

iii) $\sqrt{2^4}$

- a) i) only b) all of them c) i) and ii) only d) iii) only e) i) and iii) only

Correct Answer: all of them

2. Which of the following are rational numbers?

i) $.12345$

ii) $.33\dot{3}$ (repeating)

iii) $\sqrt{2^4}$

- a) i) only b) all of them c) i) and ii) only d) iii) only e) i) and iii) only

Correct Answer: all of them

3. Which of the following are real numbers?

i) $.12345\sqrt{-1}$

ii) $\sqrt{1 - \sqrt{2}}$

iii) $\sqrt{-2^4}$

- a) none of them b) iii) only c) ii) and iii) only d) ii) only e) i) and iii) only

Correct Answer: iii) only

4. Simplify: $(3 + \sqrt{-2})(3 - \sqrt{-2})$:

a) 13

b) 11

c) 9

d) 5

e) 16

Correct Answer: 11

5. A rational number can be described as a number which:

i) can be expressed as a ratio of two integers a/b , $b \neq 0$

ii) can be written as a repeating decimal expansion

iii) can be written as the square root of an integer

- a) all of them b) i) only c) ii) and iii) only d) i) and iii) only e) i) and ii) only

Correct Answer: i) and ii) only