Assignment 2

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

1) Let $a \in \mathbb{R}, 0 < a < 1$. Then $\lim_{n \to \infty} a^n = ?$

- 0
- 1
- $a$
- $\infty$

No, the answer is incorrect.
Score: 0

Accepted Answers:

2) Let $a \in \mathbb{R}, a > 1$. Then $\lim_{n \to \infty} a^n = ?$

- 0
- 1
- $a$
- $\infty$

No, the answer is incorrect.
Score: 0

Accepted Answers:

3) Let $a \in \mathbb{R}, a > 1$. Then $\lim_{n \to \infty} a^{1/n} = ?$

- 0
- 1
- $a$
- $\infty$

No, the answer is incorrect.
Score: 0

Accepted Answers:

4) Let $a \in \mathbb{R}, 0 < a < 1$. Then $\lim_{n \to \infty} a^{1/n} = ?$

- 0
- 1
- $a$
- $\infty$

No, the answer is incorrect.
Score: 0

Accepted Answers:

5) Consider the sequences $a_n = \sqrt{n+1} - \sqrt{n}, \quad b_n = \sqrt{n} + 1 - \sqrt{n}$, $n \in \mathbb{N}$.

Then

- Both $\{a_n\}$ and $\{b_n\}$ are convergent sequences.
- $\{a_n\}$ is a convergent sequence but $\{b_n\}$ is a divergent sequence.
- $\{a_n\}$ is a divergent sequence but $\{b_n\}$ is a convergent sequence.
- Both $\{a_n\}$ and $\{b_n\}$ are divergent sequences.

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both $\{a_n\}$ and $\{b_n\}$ are convergent sequences.