

Question 4.

Prove that mathematics is universal.

[100]

Suppose that math
is not universal.
We aim to establish
a contradiction.



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Question 4.

[100]

Prove that mathematics is universal.

Mathematics is universal
by definition



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Question 4.

Prove that mathematics is universal.

[100]

F - society.



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Question 4.

Prove that mathematics is universal.

[100]

$$\sum_{n=1}^{\infty} \frac{1}{n}$$

converges!



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Question 4.

Prove that mathematics is universal.

[100]

$$\sum_{n=1}^{\infty} \frac{1}{n^2} \text{ converges!}$$



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Question 4.

Prove that mathematics is universal.

[100]

$$\sum_{n=1}^{\infty} \frac{1}{n^3}$$

converges.



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Question 4.

Prove that mathematics is universal.

[100]

$$\sum_{n=1}^{\infty} \frac{1}{n^s} \text{ converges}$$

for all $s \in \mathbb{C}$



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Question 4.

Prove that mathematics is universal.

[100]

$$\int_0^{\infty} \frac{1}{x} dx = \infty$$



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Question 4.

Prove that mathematics is universal.

[100]

J K L



- 0 .5
- 10 1
- 20 2
- 30 3
- 40 4
- 50 5
- 60 6
- 70 7
- 80 8
- 90 9



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Question 4.

Prove that mathematics is universal.

[100]

YZ



- | | |
|----|----|
| 0 | .5 |
| 10 | 1 |
| 20 | 2 |
| 30 | 3 |
| 40 | 4 |
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