



Chapter 1

90

1.1 88

1.2 93

1.2.1 88

1.2.2 87

Chapter 2

1

2.1 Ranfom

2.1.1 lmao

Question 1 Induction

Prove that $\frac{4^n + 7^n}{11} \in \mathbb{N}$

Solution:

We will use induction to prove it is not true.

Note:

for induction based proof we will first show *case1* then prove the relation between *casen* to *casen + 1*

Claim 2.1.1 Math

Math is cool

Example 2.1.1 (basic arithmetic)

$$1 + 1 = 2$$

Theorem 2.1.1

if $x \in \mathbb{N}$ then $x^n \in \mathbb{N}$

Proof:

$$x^n = \prod_{i=0}^{i=n} x \Rightarrow x^n \in \mathbb{N}$$

Corollary 2.1.1

By the result of the proof, we can then show...

Proposition 2.1.1

$$1 + 1 = 2.$$

Definition 2.1.1 Of 0

$$0 = |\emptyset|$$

Note:

$$\{3, 3, \mathbb{R}\}$$