Theorem 1.1: The sum of the first n positive integers is:

Basis:

Induction Step 1: Assume True

Induction Step 2: Show True

Theorem 1.2: If x is any real number other than 1, then

Remark:

Basis:

Induction Step 1: Assume True

Induction Step 2: Show True

Ex 1:

Prove:

For , let P(n) be the statement:

for

Basis:

Induction Step 1: Assume True

Induction Step 2: Show True

Ex 2:

Prove:

sum of cubes of first n natural numbers is:

for

Basis:

Induction Step 1: Assume True

Induction Step 2: Show True