

1. Study Section 12.2.
2. Do Exercises 12.4(b, e).
3. Do Exercise 12.8.
4. Do Exercise 12.9.
In your induction case, you should start with $(n + 1)^2$ and use the result from Exercise 12.8.
5. Do Exercise 12.10.
 i is divisible by 3 means that $i = 3k$ for some integer k . You may use the fact that the sum of two expressions, each one divisible by 3, is also divisible by 3.