

Do 5 of the following problems.

Other interesting problems: 5.2: 14,22,29,38,42,44

1. 5.2.11
2. 5.2.15
3. 5.2.17
4. 5.2.34
5. 5.2.39
6. A new type of combination lock uses card keys. The keys are numbered 1 through 100. The lock is set so that five of the cards are “valid.” To open the lock, two valid cards must be inserted. Determine the number of attempts (inserting a pair) that guarantees opening the lock.