

32

Directions: Read each exercise carefully. Write clearly and show all necessary work to arrive at correct answers. Give all numerical answers in exact form (i.e., no decimal approximations) unless otherwise indicated. Box in your final answer where applicable. Failure to follow directions could result in points deducted.

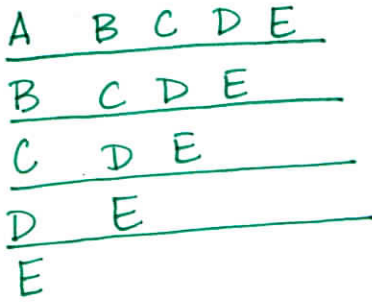
1) The sequence 0, 3, 6, 12, 24, 48, ... was used by astronomers in the 1770s to predict the locations of undiscovered planets.

a) Disregarding the first number, what kind of a sequence is this? geometric sequence

b) What are the next three terms of this sequence? 96, ~~192~~, ~~384~~

2) Sue and her four sisters are at an amusement park. They decided to pair up for roller-coaster rides so that each person will ride with each other person. How many rides must be taken?

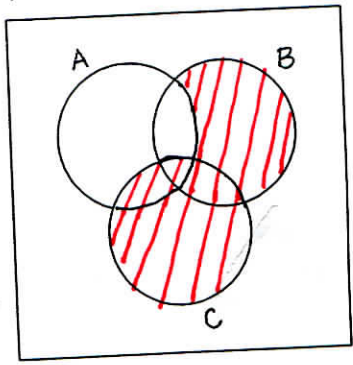
10 rides



3) There are seven coins in a purse which are worth a total of one dollar. Find two possibilities for the set of coins.

P	N	D	Q	HD
0	5	0	1	1
0	3	1	3	0
0	0	5	2	0
0	2	4	0	1

4) Shade the figure below to represent $(A' \cap B) \cup C$.



$(A' \cap B) \cup C$