

Advanced Algebra

Unit 8 Assignment #4

1) You have 13 red marbles and 7 green marbles. You will be selecting three marbles without replacement. Make a tree diagram and answer the following questions.

- 1) What is the probability of getting all green?
- 2) What is the probability of all red?
- 3) $P(\text{ exactly 2 red})$
- 4) $P(\text{ at least 1 green})$
- 5) $P(\text{ at most 2 red})$

2) Beth has 10 yellow marbles and 12 red marbles. She will be selecting three marbles without replacement. Make a tree diagram and answer the following questions.

- 1) What is the probability of selecting all yellow marbles?
- 2) $P(\text{all red})$?
- 3) $P(\text{exactly 2 red})$
- 4) $P(\text{at least 1 yellow})$
- 5) $P(\text{at most 2 red})$

Now I am expanding same problem to taking 4 marbles
Same questions. Can you do this without a tree?