

1. (2 pts.) A clown is holding nine different colored balloons. If she hands 3 of them to her partner, how many different sets of balloons could he be holding?

2. (2 pts.) An experiment consists of tossing a coin eight times and observing the sequence of heads and tails. How many different outcomes have exactly 3 tails?

3. Three girls and two boys are to be photographed.
 - a. (3 pts.) If the photographer has them stand in a straight line and has a girl to stand at each end of the line, how many different ways can they line up?

 - b. (3 pts.) If the boys kneel in a front row and the girls stand in a row behind them, how many different ways can they line up?