Quiz on 6.3: Multiplication

1. Meg is packing for a study abroad program. She doesn't want a large suitcase, but she doesn't want to wear exactly the same outfit every day.

(a) If she packs 4 pairs of shoes, 6 blouses, 2 skirts, and 3 pairs of pants, how many ensembles will she have available, assuming everything matches?

(b) Her flatmate loans her two blouses, but one of her shoes was lost in the River Seine. How many outfits are now available?

2. The Kentucky Derby often has 20 horses racing.

(a) How many possible results can there be if one is concerned with first, second, and third place (Trifecta)?

(b) How many possible results can there be if two of the horses withdraw on the day of the race (two scratches)?