

Name: _____

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Quiz 6.3: Multiplication principle

1. You are having a party and figure on average that every female you invite will bring 1.4 friends, and every male you invite will bring 1.2 friends. You figure every person at the party will need about 24 oz. of beverage and 8 oz. of snacks. If you invite 40 females and 50 males, how many ounces of beverage and how many ounces of snacks will you need to cover everyone, both invited and freeloader?
2. You are thinking of betting on a horse race. 14 horses will race, and you are considering a “tri-fecta” bet where you name the first, second, and third place winners in order. How many different tri-fecta tickets are possible for this race?
3. You are considering Swatches’ new interchangeable wardrobe line-up. They have 10 pairs of shoes, 12 pairs of pants, 8 different short-sleeve shirts, and 8 different long-sleeve shirts. Assuming you consider a pair of shoes, a pair of pants, and a shirt to be an outfit, how many different outfits are there?
4. You have rented a (roughly rectangular) park for your soccer competition. Each field needs about 130 yards by 80 yards (including spectator benches). If you can fit 10 fields side by side, and 3 fields deep, how many fields can you fit total?