

54. The number of chocolate chips in a standard 12 ounce bag of chocolate chips is 1260. A mom regularly bakes chocolate chip cookies for her boys, and a recipe makes 60 cookies.
- (a) How many chips are expected in a randomly selected cookie from the most recent batch?
 - (b) For a randomly selected cookie, what is the probability the cookie has at least 25 chocolate chips?
 - (c) The perfect cookie has at least 18 chocolate chips and no more than 40 chocolate chips, inclusive. What is the probability a randomly selected cookie is a perfect cookie?
 - (d) A famous manufacturer of chocolate chip cookies claims that 90% of their cookies have between 30 and 40 chips per cookie. One of the boys of The Cookie Mom decided to prove the company wrong. So he obtained a sample of 50 of those cookies. Of those cookies sampled, only 30 had between 30 and 40 chips. Is it likely the company's claim is true?