

# Module 2 Review

1. **Trudy has purchased a bottle of vitamins for her daughter. The vitamins are colored and there are 21 red, 21 green, 16 orange, and 14 purple. When choosing one vitamin, what is the probability of choosing**
- a. **a red vitamin?**
  - b. **a purple vitamin?**
  - c. **a green or orange vitamin?**
  - d. **two green vitamins (without replacement)?**

2. **A child has 19 pennies, 12 nickels, 7 dimes, and 8 quarters in his piggy bank. If the child shakes the piggy bank and one coin falls out, what is the probability that the coin is**
- a. **a nickel?**
  - b. **a quarter or a penny?**
  - c. **a fifty-cent piece?**

3. **A survey of 150 people's eye color was taken with the following results**

	Male	Female	Total
Blue	25	35	60
Brown	41	30	71
Green	4	15	19
Total	70	80	150

**If one person is chosen from this survey at random, what is the probability that the person**

- a. **is a female?**
- b. **is a male and has brown eyes?**
- c. **does not have green eyes?**
- d. **has blue eyes or is a male?**
- e. **has green or brown eyes?**

**f has green eyes given he is a male?**

**g is a male given he has brown eyes?**

**h has brown eyes given she's a female?**

**4 A batch of industrial coils is known to have 12 defective coils and 88 good ones. It was shipped out by mistake from the factory. . is batch is late received by the customer: ts the customer random**



**12 How many different routes can a saleswoman have if she must visit 5 different companies in a day?**

**13 Friendly Travel Agency provided the following table of information. The table gives the number of customers per day who use a credit card and the probabilities of each.**

Number of Customers Using Credit Cards, $x$	$p(x)$
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**14 The probability that 0, 1, 2, 3 or 4 people will be placed on hold when they call a radio talk show is**