2. Look at the picture of the flashlight.
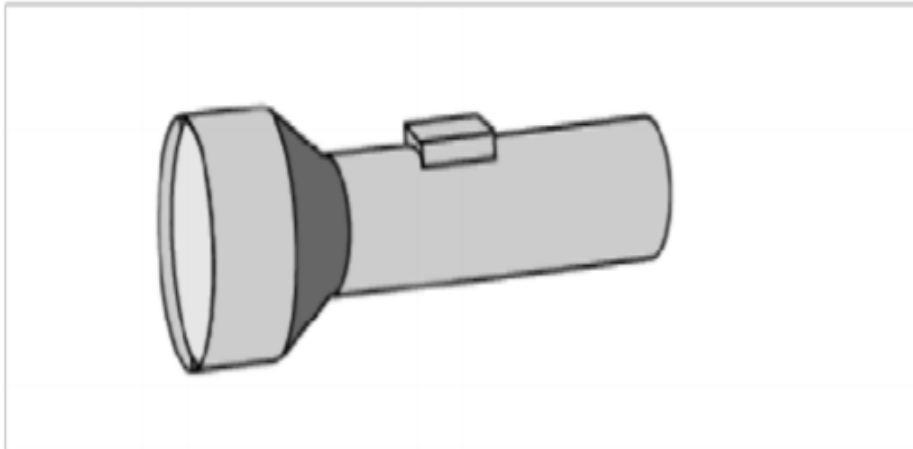

Which of these is the best estimate of the length of the flashlight?

A. 9 feet

B. 90 meters

C. 9 inches

D. 90 centimeters

5. Tiffany works at a nail salon. In the first week, she has 38 clients. In the second week, she has 12 clients on Monday, 11 clients on Tuesday, and 9 clients on Wednesday. There are no clients on Thursday and Friday.

How many fewer clients does Tiffany have in the second week than in the first week?

A. 6

B. 8

C. 16

D. 18

1. Look at the expression.

$$10 + x/2$$

Part A

Evaluate the expression for $x = 4$.

Enter your response in the gridded area:

Part B

Evaluate the expression for $x = 32$.

Enter your response in the gridded area:

3. The price of apples at three different stores is shown below.

Store R sells apples for $1.20 per pound.

Store S sells 4 pounds of apples for $5.00.

Store T sells 3 pounds of apples for $3.48.

Which of these is a true statement?

A. Store R sells apples at the lowest rate.

B. Store T sells apples at the lowest rate.

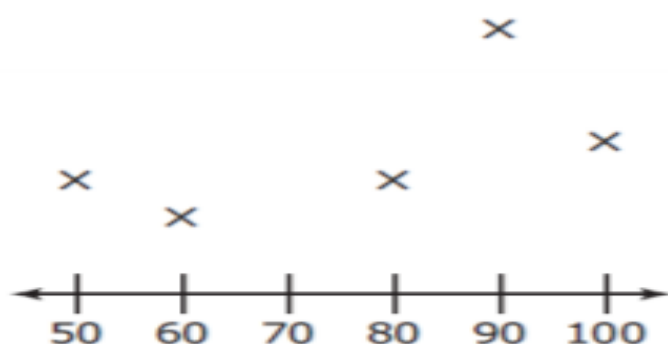C. Store S charges a lower rate for apples than Store T.

D. Store T charges the same rate for apples as Store R.

6. Jason sells trail mix online. The table below lists the number of boxes in the orders on one day for his most popular fruit and nut mix.
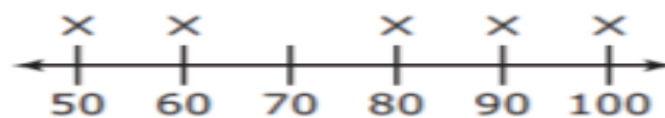
Fruit and Nut Mix Orders

100	60	90	90	100
80	50	50	100	50
90	90	60	80	90
80	90	90	100	90

Which dot plot represents the data in the table?

A.

B.

C.

D.
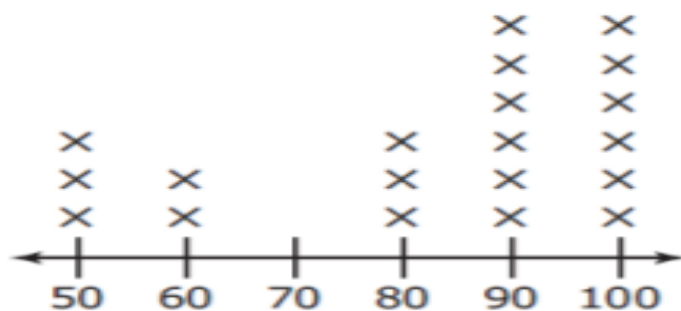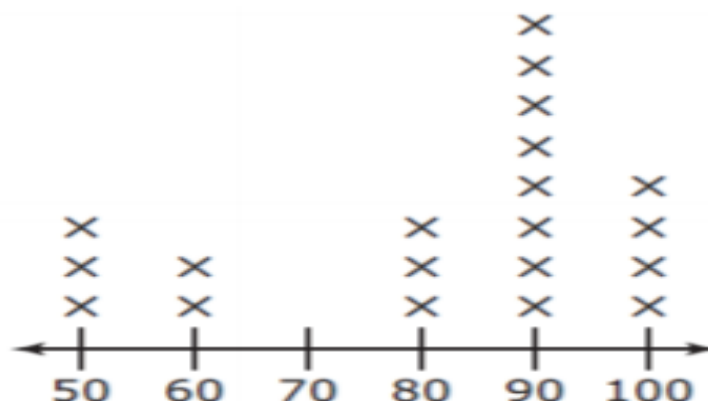
2. A community athletic club holds an election to select a president and vice president. The nominations for selection include 4 females and 3 males.

What is the probability that a female is elected president and a male is elected vice president?

A. $\dfrac{1}{12}$

B. $\dfrac{12}{49}$

C. $\dfrac{2}{7}$

D. $\dfrac{7}{12}$

5. Look at the scatter plot.
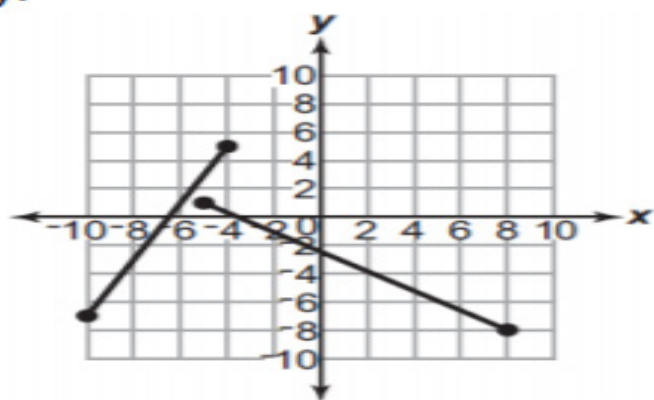

Which type of pattern is displayed in this scatter plot?

A. a linear positive association with outliers

B. a linear negative association with clustering

C. a linear negative association with no outliers
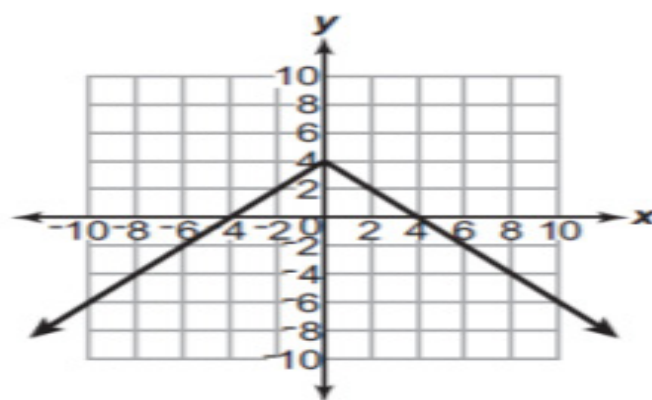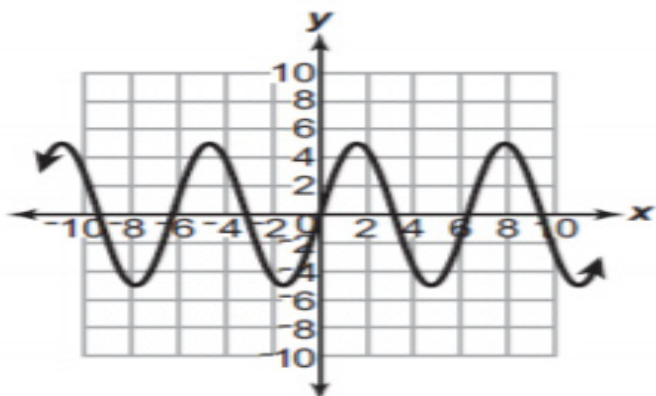
D. a linear positive association with no clustering
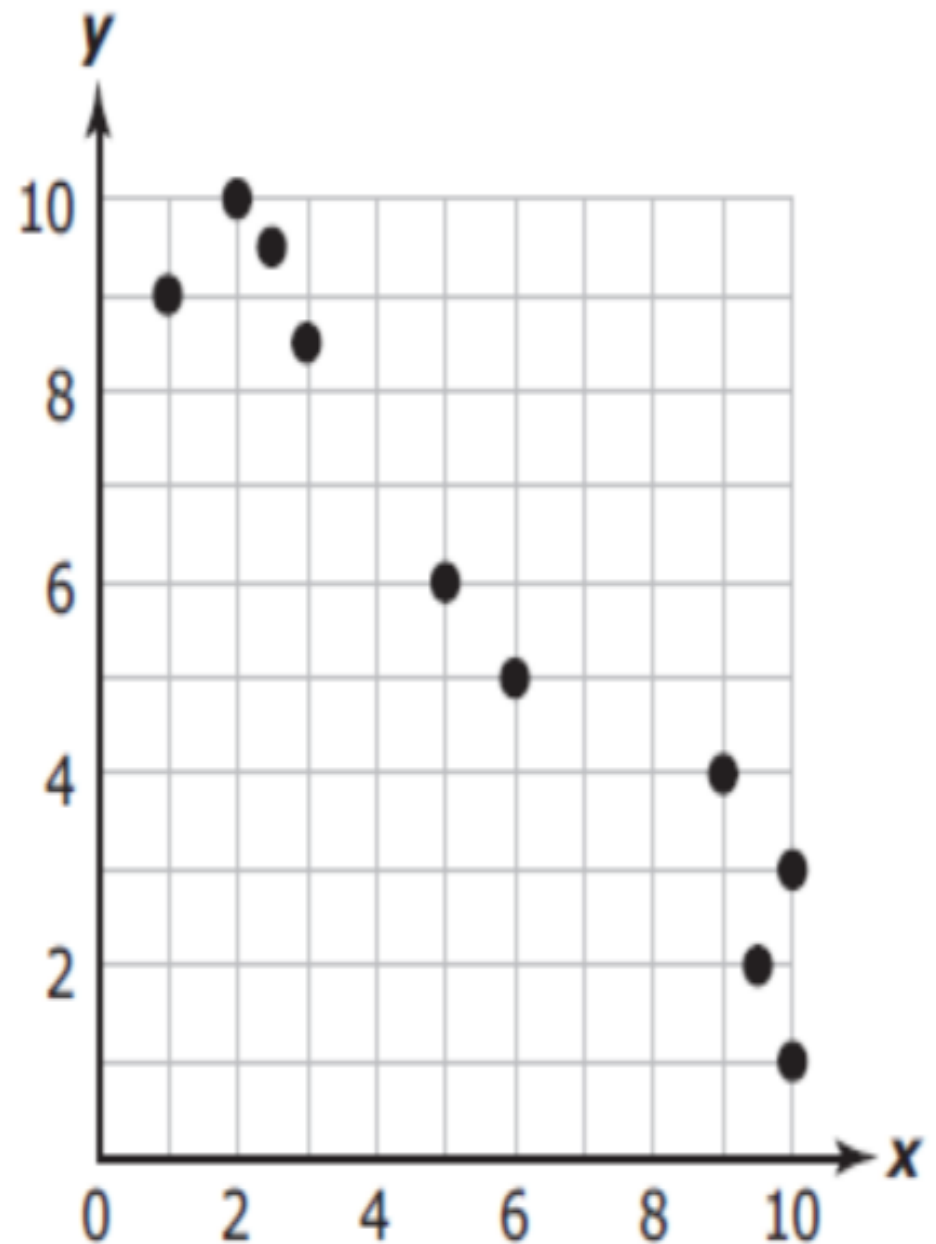
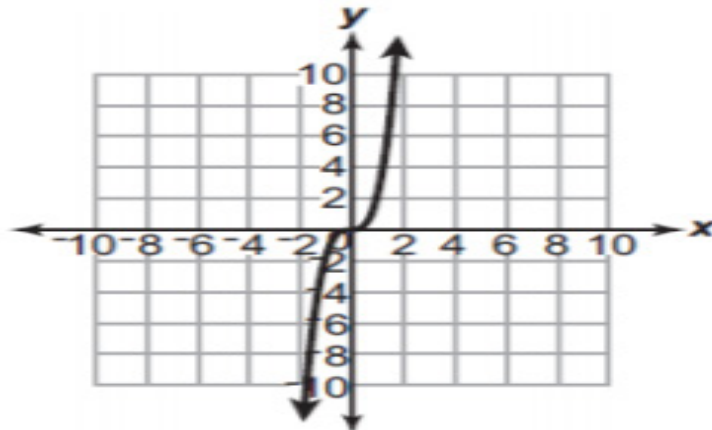**6.** Look at the graphs. Which graphs represent a function? Select the three graphs that apply.
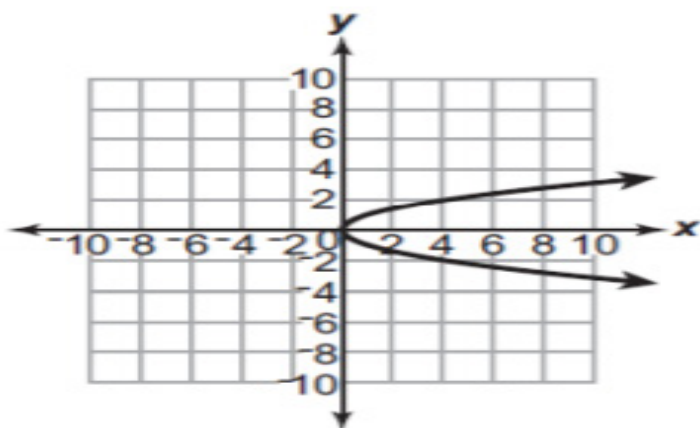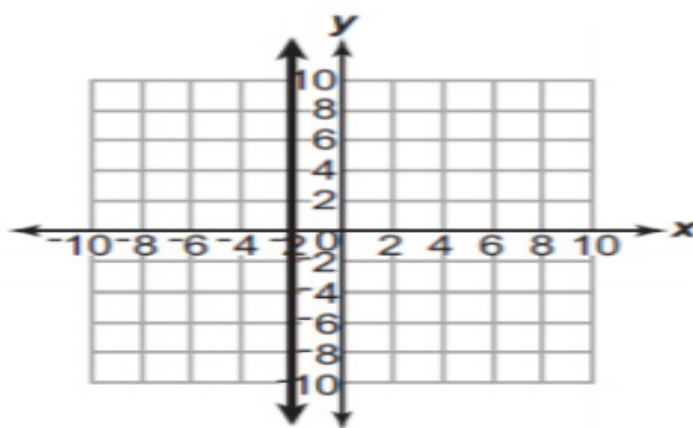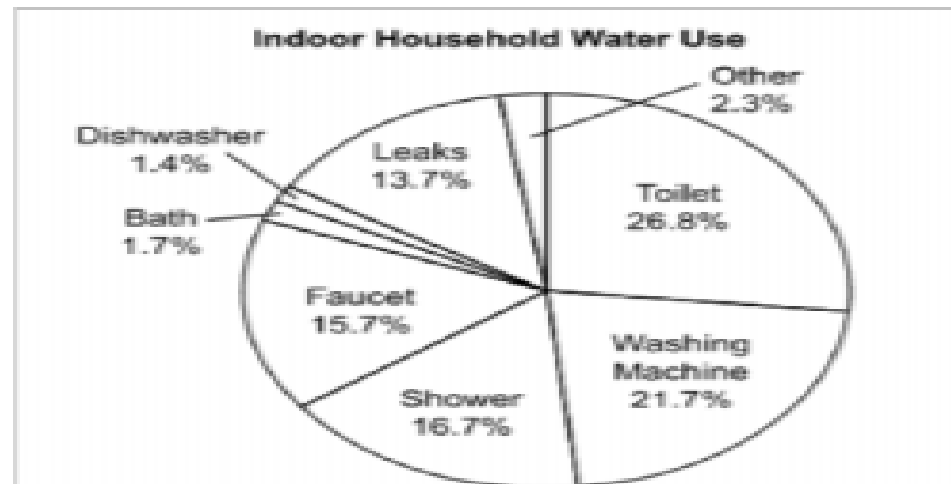

A.

B.

B.

D.

E.

F.

1. Which word has a short e vowel sound?

    A. bed

    B. dream

    C. near

    D. seed

Read the article. Then answer questions 2 through 5.

Saving Water

1   It has been said that water is the new oil. For many years, countries have fought to control rights to oil. Like oil, clean water is a natural resource. And while water is considered to be a renewable resource, it can be difficult to recycle for human consumption. People can live without oil, but they cannot survive without water.

2   Over the past fifty years, the population of the United States has doubled. During the same amount of time, water use has tripled. Today, at least 36 states are short on water. People must work to save water. If they don't, they will soon not have enough. The cost of water will rise. It will not be easy to buy. Countries will elbow each other for rights to the water that remains.

3   There is good news, however. People can make changes to save water. Think about simple tasks such as brushing teeth, shaving, or washing dishes. Leaving the water running while doing these tasks wastes a precious resource. Running dishwashers and washing machines that are not full also wastes thousands of gallons of water. Even shower length is important. Taking showers that are two minutes shorter can save hundreds of gallons a month.

Indoor Household Water Use

Other 2.3%
Dishwasher 1.4%
Leaks 13.7%
Bath 1.7%
Toilet 26.8%
Faucet 15.7%
Washing Machine 21.7%
Shower 16.7%

Read the passage. Then answer questions 1 through 7.

Whale Watching

Across the blue, rolling waves, a dark hump rises from the sea. It slides out of sight as an enormous tail lifts and falls. As it does, another hump rises beside it and begins the same dance. Several people cheer from the pontoon boat. Some raise their cameras, while others lift binoculars to get a closer view. These whale watchers are getting what they hoped for—a view of gray whales migrating south.

For thousands of years, whales have fascinated humans. However, until recent times, the average person did not have the chance to see these amazing creatures up close. The first opportunity arose in San Diego, California. There, in 1950, the Cabrillo National Monument was declared a public place to watch whales. Soon after, the first whale watching boats sailed from San Diego harbors. For $1, people could ride out into the ocean in hopes of seeing whales close-up.

The whale-watching boats became very popular. Soon similar boat trips were available from other seaports. Today millions of people around the world go whale-watching every year.

Interestingly, some whales are just as curious about humans as humans are about them. They may swim near a boat for hours, watching the passengers. Of course, this is a very exciting experience for those on board!

"I was looking through the side of a glass-bottomed whale boat," says one whale watcher. "Suddenly, a blue whale was right next to me! Its eye looked straight at me as it swam by. Its body seemed to keep going and going. It was the most amazing experience of my life!"

At up to 100 feet long, it is no wonder that the blue whale's body kept going. The blue whale is the largest mammal ever on Earth. Its body is the size of a passenger jet. Its tongue can weigh as much as an elephant.

Depending on where a person whale watches, different types of whales may be seen. From the West Coast, people may see gray whales, blue whales, minke whales, fin whales, or killer whales. East Coast whales include humpbacks, finbacks, and minkes. On both coasts, dolphins are a common sight. They enjoy eating the same shrimp-like krill as whales.

Whale watchers also may catch sight of sea lions, seals, seabirds, and fish. Whale watching gives people a unique chance to see whales in their natural surroundings. For most, it is an experience they will never forget.

Read the passage. Then answer questions 1 through 5.

Quirky Quicksand

1 Quicksand has a reputation that it does not deserve. In a typical Hollywood movie scene, a character accidentally wanders into quicksand. Sometimes, the terrified character sinks quickly out of sight, leaving only a hat floating on the surface. At other times, a dramatic escape involves grabbing a nearby tree branch or the hand of another character.

2 It is true that you will begin to sink if you step into quicksand. However, you will not be sucked in and swallowed whole. The depth of quicksand ranges from a few inches to four feet. A person of average height probably will sink only waist-deep.

3 Quicksand can form almost any place where water flows beneath a sandy surface. Some common areas for quicksand include river deltas, shores, and sandy creek beds.

4 The best condition for forming quicksand is when water seeps upward from an underground source and saturates an area of sand, silt, or other grainy soil. If you disturb (or step into) the quicksand, a loose layer of fine sand on top of the water changes into a thick, soupy liquid. The mixture settles to the bottom and packs tightly around your feet. The mud-like layer creates a strong suction, especially if you are wearing flat shoes or boots.

5 A person can float on quicksand just as he or she floats on water. The human body has a density of about 62 pounds per cubic foot. Quicksand has a density of about 125 pounds per cubic foot. Because a person is less dense than quicksand, the person will rise to the top when his or her feet are free from the paste-like sand at the bottom. The key is to remain calm and follow a few simple steps to escape.

6 Start by taking several deep breaths and trying to relax. Stretch out your back and lean backward slightly to increase your surface area. Soon, you will be able to move your legs. Rotate one leg at a time in a slow circular motion. Water will flow down the leg into the thick sand on the bottom. Then as the bottom mixture thins, you can begin to free yourself. Move slowly and carefully. The area around you also might be soggy. Thrashing about wildly will cause you to sink deeper.