Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_

**Learning Target:** I can make predictions about a population.

**Do Now**

A shipment to a warehouse consists of 3,500 MP3 players. The manager chooses a random sample of 50 MP3 players and finds that 3 are defective. How many MP3 players in the shipment are likely to be defective?

***Show your work:***

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_

**Learning Target:** I can make predictions about a population.

**Do Now**

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Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_

**Learning Target:** I can make predictions about a population.

**Do Now**

A shipment to a warehouse consists of 3,500 MP3 players. The manager chooses a random sample of 50 MP3 players and finds that 3 are defective. How many MP3 players in the shipment are likely to be defective?

***Show your work:***

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_ A

**Learning Target:** I can make predictions about a population.

**CW: Using a proportion to make predictions**

**Directions:** Read each problem. Identify the important information. Plan the proportion. Substitute in the values and solve the proportion. Label your answer.

(1) A candy company ships 120 candy bars to a local store. The store manager chooses a random sample of 40 and finds 4 are expired. This is 10% of the sample. How many candy bars are likely to be expired in the entire shipment?

How many total candy bars are shipped? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ This represents the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

  *sample, population*

How many total candy bars are in the sample? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ This represents the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

  *sample, population*

How many total candy bars were damaged? \_\_\_\_\_\_\_\_\_ This represents the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Part of the sample, the total sample*

***Show your work:***

$$\frac{part}{whole}= \frac{\%}{100}$$

$$\frac{}{\\_\\_\\_\\_\\_\\_}= \frac{}{100}$$

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(2) During the holidays, a store receives a shipment of 2,500 candy canes. An employee chooses a random sample of 100 candy canes and finds that 7 are broken. This is 7% of the sample. How many candy canes are likely to be broken in the entire shipment?

***Show your work:***

$$\frac{part}{whole}= \frac{\%}{100}$$

$$\frac{}{\\_\\_\\_\\_\\_\\_}= \frac{}{100}$$

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(3) 1,800 people attend a concert. In a random sample of 200 people, 120 state that country music is their favorite kind of music. How many people are likely wearing cowboy boots out of the 1,800 people attending the concert?

***Show your work:***

$$\frac{part}{whole}= \frac{part}{whole}$$

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(4) In a jar of 250 jelly beans, a random sample of 25 is pulled. In the random sample, 15 of the jelly beans are red. How many jelly beans are likely to be red in the entire jar?

***Show your work:***

$$\frac{part}{whole}= \frac{part}{whole}$$

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| **Readiness*** Arrived to class on time
* Actively worked on the do now
 | **Positive Contribution*** Followed along with the class example
* Actively worked on the practice problems
 | **Understanding*** Attempted all of the practice problems
* Created an accurate proportion for each problem
* Correctly solved each problem
 |
| /10 | /30 | /60 |

Comments:

Grade:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_ B

**Learning Target:** I can make predictions about a population using a proportion.

**CW: Using a proportion to make predictions**

**Directions:** Read each problem. Identify the important information. Plan the proportion. Substitute in the values and solve the proportion. Label your answer.

(1) A candy company ships 120 candy bars to a local store. The store manager chooses a random sample of 40 and finds 4 are expired. This is 10% of the sample. How many candy bars are likely to be expired in the entire shipment?

***Show your work:***

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(2) During the holidays, a store receives a shipment of 2,500 candy canes. An employee chooses a random sample of 100 candy canes and finds that 7 are broken. How many candy canes are likely to be broken in the entire shipment?

***Show your work:***

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(3) 1,800 people attend a concert. In a random sample of 200 people, 120 state that country music is their favorite kind of music. How many people are likely wearing cowboy boots out of the 1,800 people attending the concert?

***Show your work:***

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(4) In a jar of 250 jelly beans, a random sample of 25 is pulled. In the random sample, 15 of the jelly beans are red. How many jelly beans are likely to be red in the entire jar?

***Show your work:***

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| **Readiness*** Arrived to class on time
* Actively worked on the do now
 | **Positive Contribution*** Followed along with the class example
* Actively worked on the practice problems
 | **Understanding*** Attempted all of the practice problems
* Created an accurate proportion for each problem
* Correctly solved each problem
 |
| /10 | /30 | /60 |

Comments:

Grade:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_