



## Level 2: Ratios and Proportional Relationships Pretest Answer Key

### Question 1:

The Whistle-Stop train company built a new train station. The original budget for the project was 2.25 million dollars. The actual cost was 3.2 million dollars.

Approximately how much was the final cost as a percentage of the original budget?

- a. 95%
- b. 70%
- ☒ c. 142%
- d. 195%

### Question 2:

On an airplane flight, 40% of the passengers are members of the frequent flyer program. There are 112 frequent flyer members on the plane.

How many passengers are on the plane?

passengers

### Question 3:

A marine biologist tested the mercury levels in 20 kilograms of shrimp. She found that

$5\frac{1}{5}$  kilograms of the shrimp contained dangerous levels of mercury.

What percentage of the shrimp contained mercury?

%

### Question 4:

Marine biologists use a 5% solution to clean oil from a bird's feathers. There are 512 ounces of water in the washtub.

How many ounces of soap should be added to the water?

ounces

Continue ➡



**Question 5:**

There are 200 boys at Michael's school and 4% of them are named "Michael."

How many of the boys are named "Michael" at the school?

a. 5

b. 8

c. 50

d. 80

**Question 6:**

Evan's dog weighs 4 pounds.

What is the weight of Evan's dog in ounces?

a. 3 ounces

b. 4 ounces

c. 48 ounces

d. 64 ounces

**Question 7:**

An orchard produces 720 liters of maple syrup per year.

How many kiloliters of maple syrup does the orchard produce in a year?

a. 0.072

b. 0.72

c. 7.2

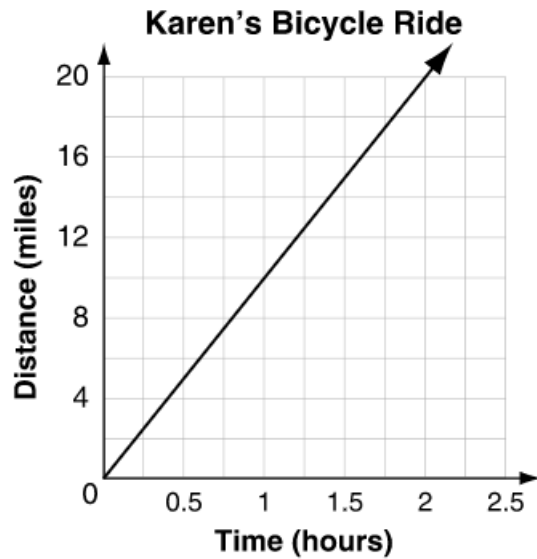
d. 72.0

Continue ➡



**Question 8:**

Karen rode her bicycle at a constant rate, as shown in the graph below.



At what rate did Karen ride her bicycle?

- a. 2 miles per hour
- b. 8 miles per hour
- ☒ c. 10 miles per hour
- d. 20 miles per hour

**Question 9:**

On a science exam, Jackson scored 85 out of 100 possible points.

- There were 20 questions on the exam.
- Each question was worth the same number of points.

How many questions did Jackson answer correctly on the science exam?

questions

Continue ➡



**Question 10:**

One 30-ounce can of tomato sauce costs \$1.20 at a store.

At that rate, what is the per ounce cost of the tomato sauce?

\$

**Question 11:**

Halley can run 4 laps around the track at school in 6 minutes.

At that speed, how many laps could she run in 20 minutes?

☐ a. 13.3 laps

☐ b. 30 laps

☐ c. 80 laps

☐ d. 120 laps

**Question 12:**

The population of bears in a national forest increased by 32 over a five year period. That number is an 8% increase in the number of bears that were in the forest at the beginning of the period.

What is the total number of bears in the forest at the end of the five year period?

bears

**Question 13:**

The neck of a certain giraffe is  $4\frac{1}{2}$  feet in length. Its neck is 30% of its height.

What is the height, in feet, of the giraffe?

☐ a. 7.5 ft

☐ b. 13.5 ft

☐ c. 15.0 ft

☐ d. 18.0 ft

Continue ➡



**Question 14:**

One day at a grocery store, 20% of the customers brought their own bags.

If 160 customers brought their own bags, what was the total number of customers that day?

customers

**Question 15:**

Trevor is walking at a rate of 6 kilometers per hour.

How many meters does Trevor walk in 1 minute?

meters