Level 1: Multiplying and Dividing Fractions Pretest Answer Key

Question 1:

The table shows the dimensions of two plots of land.

Plot	Dimensions
Plot A	286 feet by $1\frac{1}{4}$ miles
Plot B	286 feet by $\frac{7}{8}$ mile

Plot A is [a. larger than / b. smaller than / c. the same size as] Plot B because when you multiply a whole number by a fraction greater than 1, the answer is [a. greater than / b. less than] the whole number.

Plot B is [a. larger than / b. smaller than / c. the same size as] Plot A because when you multiply a whole number by a fraction less than 1, the answer is [a. greater than / b. less than] the whole number.

Question 2:

Blake's Bakery uses a 10-pound bag of blueberries to make 4 pies. Each pie should contain the same number of pounds of blueberries. How many pounds of blueberries should be used in each pie?

a. $\frac{2}{5}$

b. $\frac{3}{5}$

c. $1\frac{1}{2}$

d. $2\frac{1}{2}$

Continue ➡

Question 3:

Marcus scored $\frac{3}{5}$ as many points as David scored in a basketball game. David scored 20 points. How many points did Marcus score?

a. 10

b. 12

c. 15

d. 17

Question 4:

In Mr. Kane's class, $\frac{2}{3}$ of the students are boys. There are 24 students in the class. How many of Mr. Kane's students are boys?

a. 6

b. 8

c. 12

d. 16

Question 5:

A recipe for turkey burgers calls for $\frac{3}{4}$ pound of ground turkey. Landon wants to make only $\frac{1}{2}$ of the recipe. How much ground turkey will he need?

a. $\frac{1}{3}$ pound

b. $\frac{2}{3}$ pound

c. $\frac{1}{4}$ pound

d. $\frac{3}{8}$ pound

Continue ➡

Question 6:

A park is on 3 acres of land. The city is making a new park by increasing the size of the old park by 1 acre. How will the size of the new park compare to the size of the old park?

a. It will be $\frac{1}{4}$ as large.

b. It will be $\frac{1}{3}$ as large.

c. It will be $\frac{3}{4}$ as large.

d. It will be $\frac{4}{3}$ as large.

Question 7:

Nadine made 16 cups of punch for a class party. One serving is $\frac{1}{2}$ cup. How many servings of punch did Nadine make?

a. 8

b. 16

c. 24

d. 32

Question 8:

Meghan uses $\frac{1}{6}$ yard of ribbon to decorate each pillow she makes. She has 2 yards of ribbon. How many pillows can Meghan decorate with the ribbon she has?

12 pillows

Continue ➡

Question 9:

Maria has a rope that is 4 yards long. She cuts it into 5 equal pieces. How long is each piece?

a. $\frac{1}{5}$ yard

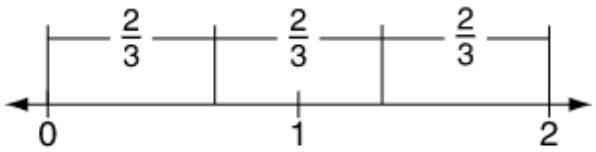
b. $\frac{1}{4}$ yard

c. $\frac{4}{5}$ yard

d. $\frac{5}{4}$ yard

Question 10:

Which division equation is modeled on this number line?



a. $2 \div \frac{1}{3} = \frac{2}{3}$

b. $2 \div 3 = \frac{2}{3}$

c. $3 \div 2 = \frac{2}{3}$

d. $2 \div \frac{2}{3} = \frac{1}{3}$

Continue

Question 11:

Which number can be placed in the box to result in a product greater than 1 but less than 5?

$5 \times \square$

a. $\frac{1}{10}$

b. $\frac{3}{5}$

c. 1

d. $2\frac{1}{2}$

Question 12:

Which statement **best** explains why the product of $3 \times \frac{1}{4}$ is less than 3?

a. Multiplying 3 by $\frac{1}{4}$ is equivalent to dividing 3 by 4.

b. The product of a fraction and a whole number is always a fraction.

c. Multiplying 3 by $\frac{1}{4}$ is equivalent to subtracting 4 from 3.

d. The product of a fraction and a whole number is always less than 1.

Question 13:

In the school library, $\frac{2}{3}$ of the books are fiction, and $\frac{1}{4}$ of those fiction books are mysteries. Which equation gives the fraction of the books in the library that are mysteries?

a. $\frac{2}{3} \times \frac{1}{4} = \frac{1}{6}$

b. $\frac{2}{3} \div \frac{1}{4} = \frac{8}{3}$

c. $\frac{2}{3} - \frac{1}{4} = \frac{5}{12}$

d. $\frac{2}{3} + \frac{1}{4} = \frac{11}{12}$

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Question 14:

Ben rode his bike $3\frac{1}{4}$ miles today. Tomorrow he plans to ride $1\frac{1}{2}$ times as far. In this equation, n represents the number of miles Ben will ride tomorrow.

$$3\frac{1}{4} \times 1\frac{1}{2} = n$$

How far will Ben ride tomorrow?

a. $2\frac{5}{8}$ miles

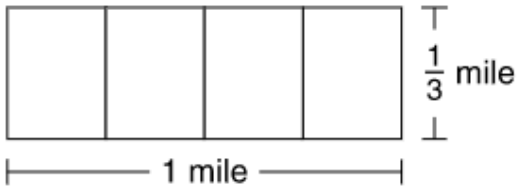
b. $3\frac{1}{8}$ miles

c. $4\frac{6}{8}$ miles

d. $4\frac{7}{8}$ miles

Question 15:

A farm covers an area of $\frac{1}{3}$ square mile. The farm is divided into 4 equal sections, as shown in this diagram.



What is the area of each section?

a. $\frac{1}{12}$ square mile

b. $\frac{1}{4}$ square mile

c. $\frac{7}{12}$ square mile

d. $\frac{3}{4}$ square mile

Stop