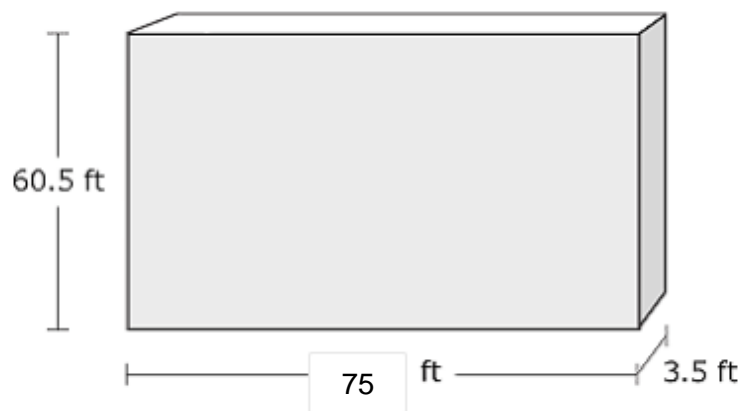# Level 2: The Number System Midtest Answer Key

Question 1:

This diagram shows the dimensions of a marine pool. The volume of the pool is 15,881.25 cubic feet.

What is the length of the pool? (Volume = $l \times w \times h$)

60.5 ft

75 ft — 3.5 ft

Question 2:

A hummingbird weighs 0.113 ounces. In one day, the hummingbird eats 3.7 times its weight in nectar.

How many ounces of nectar does the hummingbird eat in one day? Round your answer to the nearest hundredth.

0.42 ounces of nectar

Question 3:

A cargo ship is leaving Miami headed for Nova Scotia. The distance is 1,599 miles and the ship will travel at a speed of 27 mph.

How long will the trip take, rounded to he nearest tenth of an hour?

59.2 hours

Question 4:

A restaurant used 34,925 napkins in one year. The napkins come in packages of 275.

Use the drop down choices to create an equation that shows how many packages of napkins the restaurant used in one year.

[ ] [ ] [ ] = [ ]

a. 34,925   a. +   a. 34,925   a. 9,604,375
b. 275   b. −   b. 275   b. 35,200
             c. ×   c. 34,650
             d. ÷   d. 127

Question 5:

A restaurant used 1,896 cans of chicken broth. The broth is packaged in cases of 24 cans.

How many cases of chicken broth did the restaurant use?

| 79 | cases

Question 6:

A lunch truck used 26,675 plastic forks in one year. The forks come in packages of 275 forks.

How many packages of plastic forks did the lunch truck use?

a. 7,335,625

b. 26,950

c. 26,400

d. 97

Question 7:

Casey's Catering served 725 customers at the BBQ festival. He gave each customer 3 napkins.

If napkins come in packages of 75, how many packages of napkins did Casey's Catering use at the festival?

| 29 | packages

Question 8:

The Purewater Company installed 97 filters last year. The total profit for installing the water filters was $45,396.

How much profit did the company make on each water filter?

$ 468

Question 9:

Valueland Grocery Store received a delivery of bread and a delivery of cereal today. The store receives a delivery of bread every 9 days and a delivery of cereal every 12 days.

How many days will it be until the store receives deliveries of bread and cereal again on the same day?

   a. 18 days

   b. 24 days

   c. 36 days

   d. 108 days

Question 10:

Jake's Fish Shack receives a delivery from GoFish every 4 days and a delivery from Fresh Bakery every 7 days. Jake received deliveries from both GoFish and Fresh Bakery today.

In how many days will Jake receive deliveries from both companies again on the same day?

28 days

Question 11:

Which expression uses a common factor of 56 and 21 to create a true statement?

   a. $56 + 21 = 7(8 + 3)$

   b. $56 - 21 = 20 + 15$

   c. $56 + 21 = 50 + 20 + 6 + 1$

   d. $56 + 21 = (56 + 98) \div 2$

Continue ➡

Question 12:

Insulin is sold in bottles containing 0.338 ounces.

If one dose is 0.004 ounces, how many full doses are in one bottle?

| 84 | doses |

Question 13:

Mako sharks are the world's fastest sharks. Scientists clocked the speed of a Mako shark at 35.4 km per hour.

What was the speed of the shark in miles per hour? <u>Round your answer to the nearest whole number.</u> (1 km = 0.621 miles)

| 22 | miles per hour |

Question 14:

Stan has a 2-acre field. He plows the field at a rate of $\dfrac{3}{5}$ acre per hour.

How long does it take Stan to plow the entire field?

a. $\dfrac{3}{10}$ hour

b. $\dfrac{5}{6}$ hour

c. $1\dfrac{1}{5}$ hours

d. $3\dfrac{1}{3}$ hours

Continue ➡

Question 15:

Rita has $\frac{3}{4}$ gallon of lemonade. She pours $\frac{1}{24}$ gallon of lemonade into each glass.

How many glasses of lemonade can she pour?

a. 6

b. 18

c. 24

d. 32

Question 16:

The area of a rectangle is $\frac{8}{9}$ square unit. The width of the rectangle is $\frac{2}{3}$ unit.

What is the length of the rectangle?

a. $\frac{16}{27}$ unit

b. $\frac{3}{4}$ unit

c. $1\frac{1}{3}$ units

d. $1\frac{11}{16}$ units

Question 17:

Ms. Hernandez teaches singing lessons.

- Each lesson lasts $1\frac{1}{2}$ hours.
- Ms. Hernandez teaches for 18 hours each week.

How many singing lessons does Ms. Hernandez teach each week?

a. 12

b. 18

c. 27

d. 36

Question 18:

Nick has $\frac{1}{2}$ of a watermelon. He divides it equally between 8 people.

What fraction of a watermelon does each person get?

a. $\frac{1}{16}$

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

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

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

Question 19:

Sarah is having a party with 30 people. She has $2\frac{1}{2}$ large pizzas at the party. She gives equal amounts of pizza to each person.

What fraction of a pizza does each person get?

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

b. $\dfrac{1}{15}$

c. $\dfrac{1}{20}$

d. $\dfrac{1}{75}$

Question 20:

At a farm, $\dfrac{3}{8}$ of the cows have spots. There are 72 cows with spots.

What is the total number of cows at the farm?

a. 27

b. 99

c. 192

d. 216

Question 21:

Which expression is equivalent to 24 + 32?

a. 4(6 + 12)

b. 4(20 + 28)

c. 8(3 + 4)

d. 8(16 + 24)

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