io education

SEM 1 Practice Final 2019-2020

ANSWERS ✓

Directions: Read the question. Fill in the bubble next to the corresponding question number on your answer sheet.

Sample Question	Sample Answer Sheet
Sample Item Not Available	1. (A)(B)(C)(D) 2. (A)(B)(C)(D) 3. (A)(B)(C)(D) 4. (A)(B)(C)(D) 5. (A)(B)(C)(D)

1

A recipe requires $\frac{1}{4}$ of a cup of cranberries for 1 batch of scones.

How many batches of scones can be made using $6\frac{1}{2}$ cups of cranberries?

A $\frac{13}{8}$ batches

B 24 batches

C $24\frac{1}{2}$ batches

D 26 batches

$6\frac{1}{2} \div \frac{1}{4}$

$\frac{13}{2} \div \frac{1}{4}$

$\frac{13}{2} \times \frac{4}{1} =$

2

A package of dried fruit weighs $\frac{1}{2}$ of a pound. If one serving size is $\frac{1}{8}$ of a pound, how many servings would be in the package?

A 4

B $\frac{5}{8}$

C $\frac{3}{8}$

D $\frac{1}{16}$

$\frac{1}{2} \div \frac{1}{8}$

$\frac{1}{2} \times \frac{8}{1} =$

3 Solve and choose the answer written in simplest form.

$$\frac{1}{6} \div 1\frac{2}{3} =$$

(A) $\frac{1}{10}$

B $\frac{5}{9}$

C $\frac{5}{18}$

D 10

$$\frac{1}{6} \div \frac{5}{3}$$

$$\frac{1}{6} \times \frac{3}{5} =$$

4 A movie theater has 980 seats. There are 28 seats in each row. How many rows of seats are in the theater?

A 31

(B) 35

C 40

D 49

$$\begin{array}{r} 35 \\ 28\overline{)980} \\ -84\downarrow \\ \hline 140 \\ -140 \\ \hline 0 \end{array}$$

5 Find the product of 4.7 and 6.8.
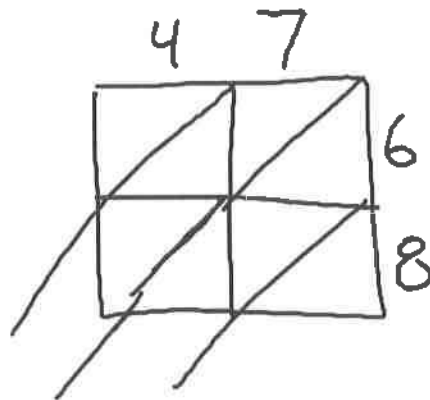
A 3.196

(B) 31.96

C 319.6

D 3196

$$\begin{array}{r} 47 \\ \times 68 \\ \hline \end{array}$$

6 43.82 + 7.4 =

    A 41.22

    B 44.56

    (C) 51.22

    D 117.82

$$\begin{array}{r} 43.82 \\ +\ 7.40 \\ \hline \end{array}$$

7 Solve.

9.43 − 4.286 =

    A 4.356

    (B) 5.144

    C 5.154

    D 5.156

$$\begin{array}{r} 9.430 \\ -\ 4.286 \\ \hline \end{array}$$

8   1.4)29.96

$$\begin{array}{r}21.4\\14\overline{)299.6}\\-28\\\hline 19\\-14\\\hline 56\\-56\\\hline 0\end{array}$$

A .214

B 2.14

(C) 21.4

D 214

9   Solve.

.806 ÷ 1.3 =

$$\begin{array}{r}0.62\\13\overline{)8.06}\\-78\downarrow\\\hline 26\\-26\\\hline 0\end{array}$$

A .0512

B .062

C .512

(D) .62

10   There were <u>24 cats</u> and <u>16 dogs</u> at the animal shelter. What is the ratio of the number of <u>dogs</u> to <u>cats</u> at the animal shelter?

(A) 2 to 3

B 3 to 2

C 4 to 10

D 24 to 16

$$\frac{16\div 8}{24\div 8}=\frac{2}{3}$$

11 Julia jogged 2 miles in 18 minutes. At that rate, how long would it take her to jog 5 miles?

A 21 minutes

B 24 minutes

C 45 minutes

D 80 minutes

$$\frac{2_{mi}}{18min} = \frac{5_{mi}}{x}$$

12 Mark burned 81 calories when he exercised for 30 minutes. At that rate, how many minutes would he need to exercise to burn 54 calories?

A 3

B 20

C 27

D 45

$$\frac{81c.}{30min} = \frac{54c}{x}$$

13 What is 25% of 80?

A 20

B 55

C 60

D 105

$$of \frac{x}{80} = \frac{25}{100}$$

14 What percentage of 40 is 12?

A 28%

(B) 30%

C 48%

D 52%

$$\frac{12}{\text{of } 40} = \frac{x}{100}$$

15 Jones Elementary School has 540 students. If 70% of the students walk to school, then how many students walk to school?

A 610

B 470

(C) 378

D 162

$$\frac{x}{540} = \frac{70}{100}$$

16 Craig is scheduled to work 40 hours this week. So far he has completed 75% of his hours. How many hours has Craig worked this week so far?

A 3

B 10

(C) 30

D 35

$$\frac{x}{40} = \frac{75}{100}$$

17 Collin is collecting rocks for a science project. So far, he has collected 36 rocks, which is 90% of the total he needs. How many total rocks does Collin need for his science project?

A 4

B 40

C 76

D 400

$$\frac{36}{X} = \frac{90}{100}$$

18 Katie's swim team is having an end-of-season pizza party. When the party started, there were 50 slices of pizza. Now there are 20 slices left. Which of the following shows how much of the pizza has been eaten?

A $\frac{20}{50}$

B 60%

C 40%

D $\frac{40}{100}$

$\frac{30}{50}$ were eaten, so..

$$\frac{30}{50} = \frac{60}{100} = 60\%$$

19 Enter the unknown value that makes this statement true.

60 is _____ % of 80

75%

$$\frac{60}{of\ 80} = \frac{X}{100}$$

20 Jodi made a snack by mixing one type of nut with one type of dried fruit. The tables below show the different amounts of nuts and dried fruit Jodi has.

Nut	Amount (in ounces)
Almonds	4
Cashews	3
Peanuts	8
Walnuts	10

Dried Fruit	Amount (in ounces)
Apples	2
Bananas	5
Cranberries	8
Raisins	12

If the ratio of ounces of nuts to ounces of dried fruit is 2:3, which type of nut and dried fruit did Jodi use?

A   almonds and bananas

B   cashews and apples

C   peanuts and raisins

D   walnuts and cranberries

$$\frac{8 \div 4}{12 \div 4} = \frac{2}{3}$$

21 Casey paid $55.00 for 20 gallons of gas.

$$55.00 \div 20 = \$2.75$$

Friend	Gallons	Amount Spent
Jackson	12	$33.60
Faith	11	$30.25
Xavier	15	$39.00
Dominic	14	$39.20

$$\rightarrow 30.25 \div 11 = \$2.75$$

Which of her friends paid the same amount per gallon of gas?

A   Jackson

B   Faith

C   Xavier

D   Dominic

22 The price at a laser tag arena is based on the number of games played, as shown in the table below. What is the price for 12 games of laser tag at the arena?

Number of Games	Price
2	$8
3	$12
5	$20
7	$28
10	$40
12	?

A $44

B $48

C $52

D $56

23 Giovanna and Janet both have jobs where they get paid by the hour. Below are the numbers of hours each have worked on each of the last 5 days and the amount of money they made. Which of these statements is true based on the given information?

Giovanna $ 7 per hr

Number of Hours	Amount of Money Made
6	$42
4	$28
5	$35
3	$21
7	$49

Janet $ 9 per hr

Number of Hours	Amount of Money Made
2	$18
8	$72
6	$54
9	$81
3	$27

A Giovanna makes $7 per hour, which is more than Janet makes.

B Janet makes $7 per hour, which is more than Giovanna makes.

C Giovanna makes $9 per hour, which is more than Janet makes.

D Janet makes $9 per hour, which is more than Giovanna makes.

24 The Wu family booked a flight from Boston, Massachusetts to Dallas, Texas. Boston is 2,493 km from Dallas. If the flight takes 3 hours, what is the average speed of the plane?

A 731 km per hour

B 831 km per hour

2,493 ÷ 3 =

C 2,490 km per hour

D 7,479 km per hour

25 Lisa paid a total of $45.00 to download 36 music files. What is the unit cost, in dollars, of a music file?

A $0.80

B $0.90

(C) $1.25

D $9.00

$$45.00 \div 36$$

26 A candy store sells 20 varieties of candy. Out of these 20 varieties, 12 varieties contain chocolate. What percent of the total number of varieties of candy contain chocolate?

A 6%

B 120%

(C) 60%

D 24%

$$\frac{12}{20} = \frac{}{100}$$

27 A football team just received a 10 yard penalty. How many feet must the ball and line of scrimmage be moved back?

A 3 feet

(B) 30 feet

C 50 feet

D 100 feet

$$10 \text{ yds} \times 3 =$$

28 Lia needs $5\frac{1}{4}$ yards of fabric to make a costume for the school play. How many feet of fabric does Lia need?

A $\frac{4}{63}$ feet

B $1\frac{3}{4}$ feet

C $2\frac{5}{8}$ feet

D $15\frac{3}{4}$ feet

$5\frac{1}{4}$ yds × 3

$\frac{21}{4}$ × $\frac{3}{1}$ = $\frac{63}{4}$

$15\frac{3}{4}$ ft.

$$4\overline{)63}$$
$$\underline{-4}\downarrow$$
$$23$$
$$\underline{-20}$$
$$3$$