Name: $\qquad$


2019-2020
Bi-Weekly Quiz 3

## Grade 7

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## Grade 7 Mathematics Reference Sheet

## CONVERSIONS

| 1 inch $=2.54$ centimeters | 1 kilometer $=0.62$ mile | 1 cup $=8$ fluid ounces |
| :--- | :--- | :--- |
| 1 meter $=39.37$ inches | 1 pound $=16$ ounces | 1 pint $=2$ cups |
| 1 mile $=5,280$ feet | 1 pound $=0.454$ kilogram | 1 quart $=2$ pints |
| 1 mile $=1,760$ yards | 1 kilogram $=2.2$ pounds | 1 gallon $=4$ quarts |
| 1 mile $=1.609$ kilometers | 1 ton $=2,000$ pounds | 1 gallon $=3.785$ liters |
|  |  | 1 liter $=0.264$ gallon |
|  | 1 liter $=1,000$ cubic centimeters |  |

## FORMULAS

| Triangle | $A=\frac{1}{2} b h$ |
| :--- | :--- |
| Parallelogram | $A=b h$ |
| Circle | $A=\pi r^{2}$ |
| Circle | $C=\pi d$ or $C=2 \pi r$ |
| General Prisms | $V=B h$ |



## TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before making your choice.
- You have been provided with mathematics tools (a ruler, a protractor, and a calculator) and a reference sheet to use during the test. It is up to you to decide when each tool and the reference sheet will be helpful. You should use mathematics tools and the reference sheet whenever you think they will help you to answer the question.


## 1

Tess rented a moving truck. The rental company charges a daily fee of $\$ 28$ along with a charge of $\$ 0.75$ per mile driven. Tess paid a total of $\$ 92$ to rent the truck for 2 days.

Which equation can be used to determine $x$, the number of miles that Tess drove the truck?

A $0.75 x+28=92$

B $0.75 x+56=92$

C $1.50 x+28=92$

D $1.50 x+56=92$

2
What is the exact decimal equivalent of $\frac{7}{12}$ ?

A 0.583
B $0.58 \overline{3}$

C 1.714
D $1.71 \overline{4}$

## 3

From 12:00 midnight to 6:00 a.m., the temperature decreased by $12^{\circ} \mathrm{C}$. If the original temperature was $12^{\circ} \mathrm{C}$, which expression can be used to represent this situation?

A $12-12$
B $\quad 12+12$
C $\quad 12-(-12)$

D $\quad-12+(-12)$

4

The regular price of an item at a store is $p$ dollars. The item is on sale for $20 \%$ off the regular price. Some of the expressions shown below represent the sale price, in dollars, of the item.

Expression A: $0.2 p$
Expression B: $0.8 p$
Expression C: $1-0.2 p$
Expression D: $p-0.2 p$
Expression E: $p-0.8 p$
Which two expressions each represent the sale price of the item?

## A Expression A and Expression E

B Expression B and Expression C
C Expression B and Expression D

D Expression C and Expression D

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5
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A farm grew 19.8 tons of wheat in 2013. The farm's wheat output increased by $9.8 \%$ from 2013 to 2014 and by $5.1 \%$ from 2014 to 2015. Which expression represents a strategy for estimating the total output of wheat, in tons, in 2015 ?

A $\quad 20+10+5$

B $\quad 20(10)(5)$
C $\quad 20+1.1+1.05$
D $\quad 20(1.1)(1.05)$

## 6

A coach of a baseball team orders hats for the players on his team. Each hat costs \$9.95. The shipping charge for the entire order is $\$ 5.00$. There is no tax on the order. The total cost of the coach's order is less than $\$ 125.00$. Which inequality can be used to determine the greatest number of hats, $h$, the coach orders?

A $5 h+9.95>125$

B $\quad 5 h+9.95<125$

C $\quad 9.95 h+5>125$
D $\quad 9.95 h+5<125$

## 7

A number, n , is multiplied by $-\frac{10}{16}$. The product is -0.4 . What is the value of n ?

A $-\frac{16}{25}$
B $-\frac{1}{4}$
C $\frac{1}{4}$
D $\frac{16}{25}$

8

Point $P$ is shown on the number line below.


The distance between point $Q$ and point $P$ is $6 \frac{1}{2}$ units. What is a number that could represent point Q?

Explain your answer

Jim needs to rent a car. A rental company charges $\$ 21.00$ per day to rent a car and $\$ 0.10$ for every mile driven.

- He will travel 250 miles.
- He has $\$ 115.00$ to spend.

Write an inequality that can be used to determine $d$, the maximum number of days that Jim can rent a car.

Inequality

Jim believes the maximum whole number of days he can rent the car is 5 . Is he correct? Why or why not?

Explain your answer.

10

Jennifer has 84.5 yards of fabric to make curtains. She makes 6 identical curtains and has 19.7 yards of fabric remaining. How many yards of fabric does Jennifer use per curtain?

Show your work or explain your answer.

## 11

Jen's goal is to run a total of 22 miles in five days. The table below shows her log for the number of miles she ran on Monday, Tuesday, Wednesday, and Thursday.

JEN'S RUNNING LOG

| Day | Distance <br> (miles) |
| :--- | :---: |
| Monday | $4 \frac{3}{4}$ |
| Tuesday | $5 \frac{1}{8}$ |
| Wednesday | 0 |
| Thursday | $6 \frac{1}{4}$ |
| Friday | $?$ |

How many miles must Jen run on Friday to reach her goal?
Show your work.
$\qquad$ miles

## 12

The table shows the weekly change in the price of one gram of silver over four weeks.
ONE GRAM OF SILVER

| Week | Weekly change in <br> the price (dollars) |
| :---: | :---: |
| 1 | +1.25 |
| 2 | -3.125 |
| 3 | +0.25 |
| 4 | +1.5 |

Part A: By how much did the price of one gram of silver change from the beginning of week 1 to the end of week 3 ? Did the price increase or decrease?

Explain how you found your answer.

Part B: At the end of week 3, the price per gram of silver was $\$ 29.28$. How much was the price per gram of silver at the beginning of week 1 ?

## Show your work

Price per gram of silver: \$ $\qquad$

13

Todd orders pictures from a photographer. Each picture costs \$7.50. A one-time shipping fee of $\$ 3.25$ is added to the cost of the order. The total cost of Todd's order before tax is $\$ 85.75$. How many pictures did Todd order?

Show your work.

Answer $\qquad$ pictures

## 14

A candy store sells caramels and milk chocolate by the pound. The table below shows the total cost, in dollars, for a pound of each type of candy the store sells.

CANDY PRICES

| Type of Candy | Price per Pound <br> (dollars) |
| :--- | :---: |
| Caramels | $\$ 9.28$ |
| Milk chocolate | $\$ 12.80$ |

How much more is the cost for $1 \frac{3}{4}$ pounds of milk chocolate than the cost for $1 \frac{3}{4}$ pounds of caramels?

Show your work.

Answer: \$ $\qquad$

Omar and Caleb each had a repair made on their cars. The initial cost of each repair is $\$ 1,000$. Omar and Caleb each have two coupons. Each of them uses both of his coupons toward the cost of the repair. One coupon is for $\$ 80$ off the repair cost. The other coupon is for $15 \%$ off the repair cost. Omar and Caleb use their coupons in a different order, as shown below.

- Omar uses the $\$ 80$ off the repair cost coupon first. He then uses the $15 \%$ off the repair cost coupon on the remaining balance.
- Caleb uses the $15 \%$ off the repair cost coupon first. He then uses the $\$ 80$ off the repair cost coupon on the remaining balance.

Who paid the least amount of money for his car repair and how much less did he pay?

## Show your work.

$\qquad$
$\qquad$ less

