## 5th Grade Math Sample Questions

Name: $\qquad$

1) Simplify the expression below using the correct order of operations.

$$
4 \div 4 \times 9 \div((6 \times 1+6) \div 4)
$$

## Show all work.

Answer $\qquad$
2) Jorge gets a weekly paycheck for working at the bookstore after school. Jorge spent $\frac{3}{5}$ of one paycheck on new clothes, $\frac{4}{10}$ of the next paycheck on new shoes, and $\frac{2}{5}$ of his last paycheck on computer games. Which of the following correctly compares these fractions?
A) $\frac{3}{5}<\frac{2}{5}$
B) $\frac{3}{5}<\frac{2}{5}$
C) $\frac{3}{5}>\frac{4}{10}$
D) $\frac{3}{5}=\frac{4}{10}$
3) Kimberly tries to drink 62 ounces of water each day. Each time she goes to the gym to work out, she brings two bottles of water with her. Which of the following measures is the same as 62 ounces?

$$
1 \text { cup = } 8 \text { ounces }
$$

A) 6 cups 7 ounces
B) 8 cups 6 ounces
C) 7 cups 7 ounces
D) 7 cups 6 ounces
4) The triangles below are similar.


The ratio of $\overline{\mathrm{AC}}$ to $\overline{\mathrm{A}^{\prime} \mathrm{C}^{\prime}}$ is $3: 4$. If the measure of $\overline{\mathrm{AC}}$ is 9 , what is the measure of $\overline{\mathrm{A}^{\prime} \mathrm{C}^{\prime}}$ ?
A) 16
B) 12
C) 15
D) 10
5) Michelle went to the carnival. The map below shows the locations of the different rides at the carnival.


Michelle is going from the bumper cars to the pirate ship. On the lines below, describe the path she could follow by stating the number of blocks of movement to the north, south, east, and/or west.
6) There are 310 pallets of tile for sale at Home Beautiful Super Store. Each pallet of tiles has a mass of 132 kilograms. What is the total mass of all these pallets of tile?
A) $40,920 \mathrm{~kg}$
B) $4,420 \mathrm{~kg}$
C) $4,092 \mathrm{~kg}$
D) $40,300 \mathrm{~kg}$
7) Logan spends 6 hours building a model rocket. If he spent an additional 40 minutes painting the rocket, how many minutes did Logan spend creating the rocket altogether?

$$
1 \text { hour }=60 \text { minutes }
$$

## Show your work.

Answer $\qquad$ minutes
8) Three-fifths of the remaining game pieces on a checkerboard are red.

## Part A

What decimal represents the amount of red game pieces on the board?

## Show your work.

## Answer

$\qquad$

## Part B

What is this amount written as a percent?

Answer $\qquad$
9) Use the rule $4 n+5$ to find the output for $n=10$ in the table below.

| Input | Output |
| :---: | :---: |
| 1 | 9 |
| 2 | 13 |
| 3 | 17 |
| 4 | 21 |
| 10 |  |
| $n$ |  |

A) 43
B) 45
C) 54
D) 35
10) The number of candy bars sold during a fundraiser by the members of the debate team is shown in the line graph below.


Which team member sold fewer than 80 candy bars but more than 60 candy bars?
A) Greg
C) Jeremy
B) John
D) Dan
11) Kelly placed her photographs in an album. On the first page, she put 3 pictures. The second page had 4 pictures, the third page had 2 pictures, and then this pattern started all over again. There are 13 pages in the album. By following this pattern, determine how many total photographs were in the album.

Answer $\qquad$ photos

On the lines below, explain how you determined your answer.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
12) Holly labeled the triangle below but did not write the degree measure for $\angle \mathrm{T}$.


What is the measure of $\angle T$ ?

Answer $\qquad$ degrees

On the lines below, explain how you can determine the measure of $\angle \mathrm{T}$ without using a protractor.
$\qquad$
$\qquad$
$\qquad$

5TH GRADE MATH, Ch 2 \#98 Stds: (CCSS) 5.NBT. 6

1) 3

WORK SHOWN: $4 \div 4 \times 9 \div((6 \times 1+6) \div 4)=4 \div 4 \times 9 \div((6+6) \div 4)=4 \div 4 \times 9 \div((12) \div 4)=4 \div 4 \times 9 \div(3)=1 \times 9 \div(3)=$ $9 \div(3)=3$

5TH GRADE MATH, Ch 1 \#268 Stds: (CCSS) 5.NF. 2
2) C

5TH GRADE MATH, Ch 5 \#158 Stds: (CCSS) 5.MD.5a, 5.MD.5b, 5.MD.5c
3) $D$

5TH GRADE MATH, Ch 4 \#94 Stds: (CCSS) 5.G. 3
4) $B$

5TH GRADE MATH, Ch 4 \#424 Stds: (CCSS) 5.G.1, 5.G. 2
5) SAMPLE ANSWERS: Head 4 blocks north and 3 blocks east OR Head 3 blocks east and 4 blocks north

5TH GRADE MATH, Ch 2 \#20 Stds: (CCSS) 5.NBT. 5
6) A

5TH GRADE MATH, Ch 5 \#201 Stds: (CCSS) 5.MD. 1
7) 400 minutes

WORK SHOWN: $6 \times 60+40=360+40=400$
5TH GRADE MATH, Ch 1 \#414 Stds: (CCSS) 5.NBT. 2
8) Part A: 0.6

WORK SHOWN: $\frac{3}{5} \times \frac{20}{20}=\frac{60}{100}=0.6$;
Part B: $\quad 60 \%$
5TH GRADE MATH, Ch 3 \#194 Stds: (CCSS) 5.OA. 3
9) $B$

5TH GRADE MATH, Ch 6\#177 Stds: (CCSS) 5.MD. 2
10) C

5TH GRADE MATH, Ch 3 \#218 Stds: (CCSS) 5.OA. 3
11) 39 photos

SAMPLE ANSWER: $3+4+2=9$ photos per 3 pages, $13 \div 3=4 \mathrm{R} 1,4 \times 9=36, \mathrm{R} 1=3$ photos in sequence, $36+3=39$
5TH GRADE MATH, Ch 4 \#206 Stds: (CCSS) 5.G.3, 5.G. 4
12) 35 degrees; The sum of the interior angles of a triangle is $180^{\circ}$., The right angle is $90^{\circ}$., 180-90-55=35

