Name:

Homework – Monday (May 6, 2019)

Solve the following problems without a calculator. You \underline{MUST} show your work. NO WORK = NO CREDIT.

1. A system of equations is shown below.

$$y = \frac{1}{2}x + 2$$

 $y = -9 - 5x$

What is the solution?

2. Solve.

$$3(2x - 1) = 5(x + 2) + x$$

- 3. A car rental company charges \$34 per day for a rented car and \$0.50 for every mile driven. A second rental company charges \$20 per day and \$0.75 for every mile driven. What is the number of miles at which both companies charge the SAME amount for a one-day rental?
- 4. Fifteen is three more than six times a number.
 - a. Write an equation for this phrase.
 - b. Solve the equation to find the number.

Homework- Tuesday (May 7, 2019)

Solve the following problems without a calculator. You \underline{MUST} show your work. NO WORK = NO CREDIT.

1. Simplify.

 $6^{-7} \cdot \frac{1}{6^3}$

2. Simplify.

$$5^{4} \cdot 5^{6} \cdot 2^{7}$$

$$2^{-2} \cdot 5^{2} \cdot 5^{2} \cdot 2^{4}$$

- 3. Hilda received a \$50 gift card to an online store. She wants to purchase some bracelets that cost \$8 each. There will be a \$10 overnight delivery fee.
 - a. Write an equation for this situation.
 - b. Solve the equation to see how many bracelets Hilda can purchase.
- 4. The value of expression two is 20,000 times greater than the value of expression one. What is the value of y?

expression one: 2×10^{x} expression two: $4 \times 10^{x+y}$

Homework - Wednesday (May 8, 2019)

Solve the following problems without a calculator. You <u>MUST</u> show your work. **NO WORK = NO CREDIT.**

- 1. Manuel bought a shirt and a sweater for a total price of \$65. The price of the sweater was \$5 more than twice the price of the shirt. What was the price of the shirt?
- 2. Solve.

$$12(x-2) + 3x = \frac{1}{2}(x+6) + 2$$

3. Write the equation in slope-intercept form.

$$4x - 2y = 18$$

4. A square has an area of 64 square units. A cube has a volume of 64 cubic units. What is the difference in the side length of the square and the length of one edge of the cube?

Homework - Thursday (May 9, 2019)

Solve the following problems **without a calculator**. You <u>MUST</u> show your work. **NO WORK = NO CREDIT.**15 girls performed community service and 5 girls did | 2. A teacher asked a class which ice cream flavor and

- 1. 15 girls performed community service and 5 girls did not. 10 boys performed community service and 15 boys did not.
 - a. Fill in the table.

	girls	boys
community service		
no community service		

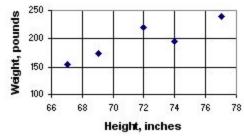
b. Find the relative frequency of girls who perform community service. Write as a percent.

toppings they prefer. The results of the survey are shown in the table.

	vanilla	chocolate	strawberry
hot fudge	8	7	2
caramel	5	4	2

Based on the table, which combination did 25% of the students prefer?

3. The scatterplot shows the weight of students according to their height. If the trend continued, about how much would someone weigh if they were 80 inches tall?



4. Identify the data sets as having a positive, a negative, or no correlation.

a. The number of hours a person has driven and the number of miles driven.

b. The number of siblings a student has and the grade they have in math class.

___ c. The age of a car and the value of the car.

d. The number of weeks a CD has been out and the total sales.