

Mathematics 6 Assignment

Name: _____

Unit 1: Large Numbers and Integers

Part 1: Multiple Choice

1. What is One hundred five million four hundred twenty two thousand sixty in standard form?
 - a) 105 422 060
 - b) 105 422 600
 - c) 105 422 006
 - d) 105 422 060 000

2. What is the value of 3 in 435 645 204
 - a) Thirty billion
 - b) Thirty billion
 - c) Three billion
 - d) Three million

3. When two opposite integers are added together, the sum is
 - a) Always positive
 - b) Always negative
 - c) It will be different every time
 - d) Zero

4. Which integer best describes a hot air balloons floats 50 meters off the ground?
 - a) -50
 - b) +50

5. What is the sum of $(5) + (-8)$?
 - a) +3
 - b) -3
 - c) +13
 - d) -13

Part 2: Representing and Understanding Large Numbers

1. Write the given numbers in **standard form**

a) two billion, three hundred eighty-three million, sixty thousand, eighteen

b) Fifteen billion, six hundred four million, nine thousand, seven hundred thirty

c) $60\,000\,000\,000 + 4\,000\,000\,000 + 300\,000\,000 + 7\,000\,000 + 600\,000 + 50\,000 + 6\,000 +$
 $400 + 10$

d) $800\,000\,000\,000 + 60\,000\,000\,000 + 400\,000\,000 + 800\,000 + 50\,000 + 5\,000 + 700 + 10 +$
4

2. Write the given numbers in written form.

a) 4 560 341 654

b) 508 090 005

c) 700 000 000 000 + 30 000 000 000 + 400 000 + 40 000 + 4 000 + 800 + 30 + 6

d) 900 000 000 + 90 000 000 + 4 000 000 + 50 000 + 5 000 + 600 + 6

3. Write the given numbers in **expanded form**

a) 3 463 121

b) 434 505 089 000

c) six billion eight hundred twenty four million fourteen thousand eight hundred fifty two

4. . Write the **value** of the underlined digits

a) 184 267 317 _____

b) 3 900 453 750 _____

c) 479 746 397 383 _____

5. a) Write the number that is 10 000 **more** than 881 462? _____

b) How many hundred thousands are in 6 300 000? _____

c) Write the number that is 43 000 000 less than 2 389 300 002? _____

6. a) Place the following number in the place value chart: 34 506 179 388

Hundred Billions	Ten Billions	Billions	Hundred Millions	Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

b) How many millions does the number above have? _____

7. Arrange the following numbers in order from **least to greatest**.

167 850 492 274 397

498 489 340 489

498 132 847 834 400

235 503 405 480 448

983 479 439 489

498 132 847 835 400

8. Rearrange the following digits to make the largest number possible and the smallest number possible. You must include all the digits.

4 8 3 0 9 0 4 2 5 8 7 1

Largest Number: _____

Smallest Number: _____

9. Susan says 9 300 000 000 is more than 92 000 000 000. Is she right or wrong? Justify your answer.

Learning Goal: Students can represent large numbers and understands place value.	1	2	3	4
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Part 3: Problem Solving with Large Numbers. Show ALL your work.

1. A company that creates stamps prints approximately 5 320 111 each day. How many stamps did they make in the month of September?

2. The warehouse workers packed 4756 boxes of dictionaries.

Each box held 24 dictionaries. They also packed 5892 boxes of spelling books.

Each box held 36 books. **Estimate first, without using a calculator.** How many books did the workers pack altogether?

3. Enrique's crew planted 258 rows of tomatoes. Each row had 175 plants. How many tomatoes did Enrique's crew plant?

Learning Goal: Students can solve problems with large whole numbers.	1	2	3	4
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Part 4: Integers

1. Write an integer to represent each situation.

 - a) A building is 35 stories tall. a. _____
 - b) Hikers descended about 270 feet. b. _____
 - c) Bob owes his sister \$12. c. _____
 - d) The temperature rose 19° . d. _____
 - e) The city is 15 feet below sea level. e. _____
 - f) You deposit \$25 in your bank account. f. _____

2. The change in position of the ball during each play of a football game is measured in yards.

 - a) What integer best represents a gain of 5 yards? _____
 - b) What integer best represents a loss of 15 yards? _____
 - c) What would the number 0 represent in this context?

3. Compare the integers. Use the symbols $<$, $>$, or $=$.

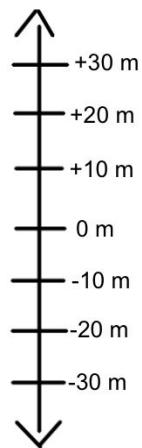
 - a. $-4 \underline{\hspace{2cm}} 13$
 - b. $99 \underline{\hspace{2cm}} -99$
 - c. $23 \underline{\hspace{2cm}} -23$
 - d.. $-33 \underline{\hspace{2cm}} 0$
 - e. $47 \underline{\hspace{2cm}} -49$
 - f. $0 \underline{\hspace{2cm}} -4$

4. Plot the integers on the number lines:

a) $5, -2, 8, 2, -10$



b) $20, -15, 35, 0, -5$



5. Draw a pictorial representing of each of the integers below.

a) -5 b) $+8$ c) 0

6. The water level of a lake is normally 3 feet above sea level and has a depth of 32 feet. During a flood, the water level rose 5 feet above normal. After 2 months with no rain, the water level dropped 7 feet. How would you describe the present water level?

7. Describe the zero principle. Draw a picture to accompany your description.

8.. Draw pictorial representations to show to sum of

a) $(-8) + (+11)$

b) $(-5) + (-4)$

c) $(-15) + (+10)$

Learning Goal: Students can representing integers concretely and pictorially	1	2	3	4
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BONUS QUESTION

Donna and Kirk are testing two elevators in a high rise building.

Donna gets in elevator #1 and does the following:

- Goes up 29 floors
- Goes down 8 floors
- Rises 12 floors
- Descends 21 floors
- Ascends 6 floors
- Donna gets off the elevator

At the same time, Kirk gets in elevator #2 and does the following:

- Goes up 10 floors
- Descends 14 floors
- Ascends 25 floors
- Rises 4 floors
- Goes down 7 floors
- Kirk gets off the elevator

a. Donna traveled to the highest floor in the building.

What integer would represent the highest floor?

a. _____

b. Kirk went to the lowest floor in the building.

What integer would represent the lowest floor?

b. _____

c. What floor did Donna get off the elevator?

c. _____

d. What floor did Kirk get off the elevator?

d. _____

e. How many floors apart are Donna and Kirk?

e. _____