

Integers, Place value

Place Value: The value of each digit in the number.

Example. 9 123 456 Start from the right and make group of three.

9	1	2	3	4	5	6
Million	Hundred thousand	Ten thousand	Thousand	Hundred	Tens	Unit

So we can write this number as Nine million one hundred twenty-three thousand four hundred and fifty six.

Positive Integer – Any positive whole number like 2, 15, 20.

Negative Integer – Any negative whole number like -2, -7, -25.

Exercise:1

1. Mary has four number cards: (7), (2), (1), (9). She is asked to arrange them in order to make different, four-digit numbers.

- a) Which is the smallest number Mary can make? _____
- b) Which is the largest number Mary can make? _____
- c) Find the difference between the largest and the smallest number. _____
- d) Find the sum of the largest and the smallest number. _____

2. In the number 7 213 456, the figure 3 has the value of 3000.

- a) What is the value of the 2? _____
- b) What is the place value of 7? _____
- c) What is the place value of 4? _____

Write these numbers into words.

- 3. 53246 _____
- 4. 203550 _____
- 5. 111225 _____
- 6. 3025586 _____

7. Write the following number - three million, fifty-six thousand, one hundred and two - in figures: _____

8. Define integers and write one positive integer and one negative integer?

9. Is 0 a whole number?

10-12 . Write the integer that makes the following sentence true:

10a) _____ + - 9 = -3	11a) $2 \times ^{-}3 =$ _____	12a) _____ $\times ^{-}7 = 49$
b) _____ + $^{-}4 = ^{-}6$	b) $^{-}2 \times ^{-}3 =$ _____	b) _____ $\times ^{-}6 = 48$
c) _____ + 9 = $^{-}3$	c) $^{-}3 \times 5 =$ _____	c) _____ $\times 2 = ^{-}12$
d) _____ + $^{-}2 = 3$	d) $^{-}9 \times ^{-}6 =$ _____	d) _____ $\times ^{-}4 = ^{-}16$

13. Is $70 - -39$ positive or negative? _____

14. Is -4×11 positive or negative? _____

15. Simplify:

a) $6 + -4 + 13 - 6 =$ _____

b) $^{-}6 + -3 - 10 + 8 =$ _____

c) $5 + ^{-}9 + 4 - 6 =$ _____

d) $7 + 8 - 8 - 9 =$ _____

18. While hiking, Ruth went up 200 meters. If Ruth started at 200 meters above sea level, which integer represents her elevation now? _____

19. Sophie says: If n represents a prime number, then $2n + 1$ will also represent a prime number. Use an example to explain why she is **wrong**.

20. Sandra is thinking of two numbers.

Her two numbers have a **negative sum**, but a **positive product**.

Give an example of what her numbers could be.

_____ and _____

(b) Mark is also thinking of two numbers.

His two numbers have a **positive sum**, but a **negative product**.

Give an example of what his numbers could be.

_____ and _____