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### <u>SUMMER VACATION ASSIGNMENT/HW 2022-23</u>

#### Class- VII Subject- MATHEMATICS

#### **INSTRUCTIONS:**

- Read all the questions carefully before solving. Write the solution of questions in Mathematics homework notebook.
- Complete the project in neat and clear hand writing and attractive in your Homework notebook.

#### Questions

- 1. When the integers 10, 0, 5, -5,-7 are arranged in descending or ascending order, then find out which of the following integers always remains in the middle of the arrangement.
  (a) 0 (b) 5 (c) -7 (d) -5
- **2.**By observing the number line, state which of the following statements is not true?



- **3.**By observing the above number line, state which of the following statements is true?
- (a) B is 2 (b) A is -4 (c) S is -13 (d) B is -4

**4.** Next three consecutive numbers in the pattern 11, 8, 5, 2,

, \_\_\_\_\_, are (a) 0, -3, -6 (b)-1,-5,-8 (c) -2, -5, -8 (d)-1,-4,-7

## **5.**Which of the following statements is not true?

(a) When two positive integers are added, we always get a positive integer.

(b) When two negative integers are added, we always get a negative integer.

(c) When a positive integer and a negative integer are added, we always get a negative integer.

(d) Additive inverse of an integer 2 is (-2) and additive inverse of (-2) is 2.

6.On the following number line value, 'zero' is shown by the point



7. The value of 5 + (-1) lie between
(a) 0 and -10
(b) -2 and 10
(c) -4 and -15
(d) -6 and -2

8 If ⊗, ○, Ø and • represent some integers on number line, then descending order of these numbers is



**9.** Water level in a well was 20 m below ground level. During rainy season, rainwater collected in different water tanks was drained into the well and the water level rises 5 m above the previous level. The wall of the well is lm 20cm high and a pulley afixed at a height of 80 cm. Raghu wants to draw water from the well. The minimum length of the rope, that he can use is



- 10. Using number line, find:
  (i) 3 × (-5)
  (ii) 8 × (-2)
- 11. Solve the following: (i)  $(-8) \times (-5) + (-6)$ (ii)  $[(-6) \div (-3)] + (-4)$ (iii)  $(-10) \times [(-13) + (-10)]$ (iv)  $(-5) \times [(-6) - 5]$
- 12. You have ₹ 500 in your saving account at the beginning of the month. The record below shows all of your transactions during the month. How much money is in your account after these transactions?

Cheque No.	Date	Transactions description	Payment	Deposit
384102	4/9	Jal Board	₹ 120	₹ 200
275146	12/9	Deposit		
384103	22/9	LIC India	₹ 240	₹ 150
801351	29/9	Deposit		

**13.** The given table shows the freezing points in °F of different gases at sea level. Convert each of these into °C to the nearest integral value using the relations and complete the table

$$C = \frac{5}{9} (F - 32)$$

Gas	Freezing point at sea level (°F)	Freezing point at sea level (°C)
Hydrogen	-435	
Krypton	-251	
Oxygen	-369	

- **14.** Taking today as zero on the number line, if the day before yesterday is 17 January, what is the date on 3 days after tomorrow?
- 15. Social Studies Application remembering that 1AD came immediately after 1 BC, while solving following problems take 1BC as -1 and 1AD as + 1.

(i) The Greeco-Roman era, when Greece and Rome ruled Egypt, started in the year 330 BC and ended in the year 395 AD. How long did this era last?

(ii) Bhaskaracharya was born in the year 1114 AD and died in the year 1185 AD. What was his age when he died?

(iii) Turks ruled Egypt in the year 1517 AD and Queen Nefertis ruled . Egypt about 2900 years, before the Turks ruled. In what year did she rule?

(iv) Greek Mathematician Archimedes lived between 287 BC and 212 BC and Aristotle lived between 380 BC and 322 BC.Who lived during an earlier period?

**16.** The table shows the lowest recorded temperatures for each continent. Write the continents in order from the lowest recorded temperature to the highest recorded temperature.

The Lowest Recorded Temperatures				
Continent	<b>Temperature (in Fahrenheit)</b>			
Africa	-11°			
Antarctica	-129°			
Asia	-90°			
Australia	-9°			
Europe	-67°			
North America	-81°			
South America	-27°			

# 17. <u>PROJECT WORK:</u> Write a paragraph ( in not more than 100 words) on "RAMANUJAN - The Great Mathematician". Write the important contributions of him .

#### 18. Learn *multiplication* table from 2 to 20.

**Note**: all the students have to write all these questions in Homework notebook separately.