



# INDIAN SCHOOL AL WADI AL KABIR

Holiday Assignment (2019-20)

Class: VIII

Sub: MATHEMATICS

Submission Date

Date : 23-05-2019

8<sup>th</sup> Aug 2019

**Instructions:**

- (i) All questions are compulsory
- (ii) Please write down the serial number of the question before attempting it.

**Section A : Multiple Choice Question**

**Q.1.** The value of  $\frac{p}{q} + \frac{r}{q} =$

- |          |                     |          |                   |          |                   |          |               |
|----------|---------------------|----------|-------------------|----------|-------------------|----------|---------------|
| <b>A</b> | $\frac{pq + rq}{q}$ | <b>B</b> | $\frac{p + q}{r}$ | <b>C</b> | $\frac{p + r}{q}$ | <b>D</b> | None of these |
|----------|---------------------|----------|-------------------|----------|-------------------|----------|---------------|

**Q.2.** If ABCD is a parallelogram, then  $\angle B - \angle D$  is equal to

- |          |     |          |    |          |     |          |     |
|----------|-----|----------|----|----------|-----|----------|-----|
| <b>A</b> | 60° | <b>B</b> | 0° | <b>C</b> | 80° | <b>D</b> | 90° |
|----------|-----|----------|----|----------|-----|----------|-----|

**Q.3.** 8740000000 can be written in the standard form as:

- |          |                    |          |                       |          |                       |          |                   |
|----------|--------------------|----------|-----------------------|----------|-----------------------|----------|-------------------|
| <b>A</b> | $8.74 \times 10^9$ | <b>B</b> | $87.4 \times 10^{-9}$ | <b>C</b> | $8.74 \times 10^{-9}$ | <b>D</b> | $874 \times 10^8$ |
|----------|--------------------|----------|-----------------------|----------|-----------------------|----------|-------------------|

**Section A : Match the following**

	Column A	Column B
<b>Q.4.</b>	The sum of two rational numbers is $\frac{-5}{12}$ . If one of the numbers is $\frac{-8}{21}$ , the other number will be-----	(i) $\frac{-5}{84}$
<b>Q.5.</b>	The value of $\left(\frac{-2}{3}\right)^4$ is equal to	(ii) $\frac{-3}{84}$
<b>Q.6.</b>	The multiplicative inverse of $\frac{4}{28} \times \frac{-5}{12} =$	(iii) $\frac{5}{48}$
		(iv) $\frac{16}{81}$

**Section B : Short Answer Questions (Type – 1)**

<b>Q.7.</b>	The measures of two adjacent angles of a parallelogram are in the ratio 1:2. Find the measures of each of the angles of the parallelogram. <b>Ans: 60°, 120°</b>
<b>Q.8.</b>	Find : $\frac{-5}{3} \div \frac{25}{24}$ <b>Ans: <math>\frac{-8}{5}</math></b>
<b>Q.9.</b>	Construct a square whose one side is 5.4 cm
<b>Q.10.</b>	ABCD is a Trapezium in which $\angle ADC = 115^\circ$ and $\angle ABC = 105^\circ$ . Find i) $\angle DAB$ ii) $\angle BCD$
<b>Q.11.</b>	Express the following numbers in usual form: a) $3.768 \times 10^{-5}$ b) $7.92 \times 10^7$
<b>Q.12.</b>	The value of $(5^{-1} + 3^{-1} + 2^{-1})^{-1} = \text{-----}$ <b>Ans: <math>\frac{30}{31}</math></b>

**Section C : Long Answer Questions (Type – 1)**

<b>Q.13.</b>	Find the value of 'p' for which, $32 \times 2^{p+2} = 2^{10}$
<b>Q.14.</b>	Simplify: $\left[\left(\frac{-3}{5}\right)^{-2}\right]^3 \times \left(\frac{1}{5}\right)^{-6}$ <b>Ans: <math>\left(\frac{-25}{3}\right)^6</math></b>
<b>Q.15.</b>	Construct a quadrilateral ABCD in which AB = 4.5cm, BC = 4 cm, CD = 6.5 cm, DA = 3 cm and BD = 6.5 cm.
<b>Q.16.</b>	Represent the following rational numbers on a number line: $\frac{-2}{3}, \frac{-1}{6}, 0, 1, \frac{2}{6}$
<b>Q.17.</b>	Construct a rhombus whose diagonals are 7.8 cm and 6.2 cm
<b>Q.18.</b>	Name the property: a) $\frac{7}{8} + \frac{4}{5} = \frac{4}{5} + \frac{7}{8}$ b) $\frac{4}{9} \times 1 = \frac{4}{9}$ c) $\left(\frac{6}{11} + \frac{4}{5}\right) + \frac{3}{11} = \frac{6}{11} + \left(\frac{4}{5} + \frac{3}{11}\right)$

**Section D : Long Answer Questions (Type – 2)**

<b>Q.19.</b>	If $x = \frac{-3}{5}$ , $y = \frac{1}{4}$ , $z = \frac{5}{6}$ verify  a) $x \times y = y \times x$ b) $x \times (y + z) = (x \times y) + (x \times z)$
<b>Q.20</b>	Find 6 rational numbers between $\frac{-1}{6}$ and $\frac{-2}{3}$
<b>Q.21</b>	Construct a quadrilateral PQRS in which $\angle Q = 45^\circ$ , $\angle R = 90^\circ$ , $QR = 5\text{ cm}$ , $PQ = 4\text{ cm}$ and $RS = 3\text{ cm}$
<b>Q.22.</b>	The angles of a pentagon are $x$ , $x - 5^\circ$ , $x + 10^\circ$ , $2x + 15^\circ$ and $2x + 30^\circ$ . Find all the angles.  <p style="text-align: right;"><b>Ans: <math>70^\circ, 65^\circ, 80^\circ, 155^\circ, 170^\circ</math></b></p>
<b>Q.23.</b>	Use distributive property and find:  $\frac{-2}{3} \times \frac{-3}{7} + \frac{5}{2} \times \frac{5}{6} - \frac{-3}{7} \times \frac{1}{6}$ <p style="text-align: right;"><b>Ans: <math>\frac{205}{84}</math></b></p>
<b>Q.24.</b>	Evaluate:  $\frac{6^3 \times 5^4 \times 3^2}{10^2 \times 81}$ <p style="text-align: right;"><b>Ans: 150</b></p>
<b>Q.25.</b>	Find the value using laws of exponents:  a) $\frac{7^5}{7^3}$ b) $(5)^{-4} \times (3)^{-4}$ c) $-\left(\frac{-8}{9}\right)$ d) $[(13)^2]^{-3}$
	<p style="text-align: center;">*****</p>