

# Global Academy School

## Work sheet

### Class 8

### Maths

Q1. Evaluate :

1.  $\left(\frac{3}{5}\right)^3$

2.  $\left(\frac{-3}{4}\right)^4$

3.  $\left(\frac{-2}{5}\right)^5$

4.  $5^{-3}$

5.  $\left(\frac{1}{3}\right)^{-4}$

6.  $\left(\frac{5}{2}\right)^{-3}$

Q2 Evaluate:

1)  $\left(\frac{2}{3}\right)^3 \times \left(\frac{2}{3}\right)^2$

2)  $\left(\frac{4}{7}\right)^5 \times \left(\frac{4}{7}\right)^{-3}$

3)  $\left(\frac{8}{5}\right)^{-3} \times \left(\frac{8}{5}\right)^2$

4.  $\left(\frac{3}{8}\right)^{-2} \times \left(\frac{4}{5}\right)^{-3}$

Q3. Simplify:-

1.  $(2^{-1} \times 5^{-1})^{-1} \div 4^{-1}$

ii)  $\left(\frac{1}{2}\right)^{-2} + \left(\frac{1}{3}\right)^{-2} + \left(\frac{1}{4}\right)^{-2}$

iii) Evaluate  $(5^{-1} \times 3^{-1})^{-1} \div 6^{-1}$

Q4. Express each of the following numbers in standard form

(i) 6872

(ii) 140000

(iii) 1536000000

Q5. Express each of the following numbers in one standard form

i) 0.00002

ii) 0.000000061

iii) 0.00000000837

Q6. Write each of the following numbers in usual form

1.  $3.74 \times 10^5$

2.  $6.912 \times 10^8$

$$3. 4 \cdot 1253 \times 10^7$$

$$4. 2 \cdot 5 \times 10^4$$

$$5. 5 \cdot 17 \times 10^6$$

$$6. 1 \cdot 679 \times 10^q .$$

Q7. The diameter of the sun is  $(1 \cdot 4 \times 10^q)_m$  and the diameter of the earth is  $(1 \cdot 2756 \times 10^7)_m$ . Show that the diameter of the sun is nearly 100 times the diameter of the earth.

Q8. By what number should  $\left(\frac{-2}{3}\right)^{-3}$  be divided so that the quotient may be  $\left(\frac{4}{27}\right)^{-2}$

Q9 if  $5^{2x+1} + 25 = 125$ , Find the value of X

Q10. Find the value of x for which

$$\left(\frac{5}{3}\right)^{-4} \times \left(\frac{5}{3}\right)^{-5} = \left(\frac{5}{3}\right)^{3x}$$