Pragathi

CENTRAL SCHOOL

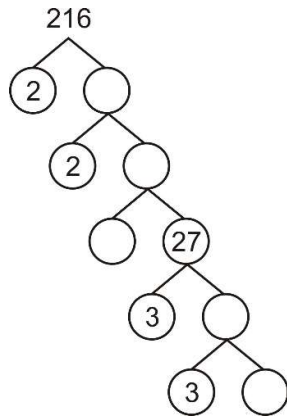Rise. Reach.

HOLIDAY HOME WORK

CLASS : VIII   SUBJECT : MATH

WEEK – 1 : LCM & HCF

1) List out prime numbers from 1 to 100.

2) Express 49 as the sum of three odd primes.

3) Write the first four multiples of

   a) 13   b) 20   c) 27

4) Write the factors of

   a) 18   b) 48   c) 368

5) Complete the factor tree.

6) Express as a product of prime factors by using the factor tree method.

   a) 136   b) 4199   c) 1000

7) Find the HCF of

   a) 650, 1050   b) 42, 48, 72, 144

8) Find the LCM of

   a) 48, 64, 120   b) 102, 170, 136

   c) 30, 36, 40   d) 30, 60, 90

9) Find the HCF by continued division method.

   a) 650, 1050   b) 30, 60, 90   c) 54, 128, 90

10) Find the LCM by division method.

   a) 48, 64, 120   b) 102, 170, 136   c) 42, 48, 72, 144

WEEK – 2 : FRACTIONS & DECIMALS

1) $5 + \dfrac{8}{3} =$ _____.

2) $8 \times \dfrac{2}{3} =$ _____

3) $\dfrac{2}{3}$ of $\dfrac{5}{6} =$ _____.

4) Equivalent fraction of $\dfrac{4}{5}$ is _____.

5) $\dfrac{11}{9} =$ _____ write 3 equivalent fraction.

6) $3\dfrac{1}{3} + 4\dfrac{2}{3} =$ _____.

7) $1 - 6\dfrac{7}{8} =$ _____.

8) $5\dfrac{7}{6} \times 1\dfrac{2}{37} =$ _____.

9) $(\dfrac{2}{5}$ of $15) - (\dfrac{1}{3}$ of $12) =$ _____.

10) $2\dfrac{1}{3} \div 3\dfrac{4}{7} =$ _____.

11) The value of $23.875 - 0.235 =$ _____.

12) $10.05 \times 1.05 =$ _____.

13) Which is greater $\dfrac{7}{4}, \dfrac{9}{4}, \dfrac{8}{4}, \dfrac{11}{4}$?

14) Which is lesser $\frac{3}{5}, \frac{2}{5}, \frac{7}{5}, \frac{6}{5}$?

15) $\frac{3}{5} + \frac{4}{8} =$ _____.

WEEK – 3 : FRACTIONS & DECIMALS

1) Simplest form of $\frac{375}{1000}$ is _____.

2) $\frac{4}{7} \times \text{——} = \frac{32}{35}$

3) 1827.582 x 10 = _____

4) 3.82 x 100 = _____

5) Decimal form of 99 rupees 77 paise is _____.

6) Expanded form of 1.11 is _____.

7) 95 mm = _____ kms.

8) Express 10 cm in metre and kilometer.

9) Write equivalent rational numbers for $\frac{-15}{36}$

10) The reciprocal of $3 \frac{2}{3}$ is _____.

11) By what number should $2 \frac{3}{5}$ be multiplied to get $1 \frac{6}{7}$?

12) 4.1 x 0.1 x 0.1 = _____.

13) 2.08 ÷ (0.16) = _____.

14) What should be subtracted from $\frac{-3}{4}$ to get $\frac{1}{6}$?

15) 2m 5mm = _____.

WEEK – 4 : FRACTIONS & DECIMALS

1) Find $\frac{4}{5}$ of (a) 20   (b) 35.

2) Find $\frac{1}{2}$ of (a) $2 \frac{3}{4}$ (b) $4 \frac{2}{9}$

3) Sushant reads $\frac{1}{3}$ part of a book in 1 hr. How much part of the book will he read in $2 \frac{1}{5}$ hours.

4) $\frac{2}{3} \times 2 \frac{2}{3} =$ _____.

5) $\frac{2}{5} \times 5 \frac{1}{4} =$ _____.

6) Which is greater $\frac{2}{7}$ of $\frac{3}{4}$ or $\frac{3}{5}$ of $\frac{5}{8}$.

7) A car runs 16 km using 1 litre of petrol. How much distance will it cover using $2 \frac{3}{4}$ litres of petrol.

8) Find (a) $14 \div \frac{5}{6}$ (b) $\frac{7}{3} \div 14$

9) Reciprocal of $\frac{3}{7}$ is _____.

10) Find (a) $\frac{2}{5} \div \frac{1}{2}$ b) $2 \frac{1}{3} \div \frac{3}{5}$ c) $3 \frac{1}{2} \div \frac{8}{2}$

11) Find the sum   a) $\frac{5}{4} + \left(-\frac{11}{4}\right)$ b) $\frac{-9}{10} + \frac{22}{15}$

12) Find a) $\frac{7}{24} - \frac{17}{36}$ b) $\frac{5}{63} - \left(-\frac{6}{21}\right)$ c) $\frac{-6}{13} - \left(-\frac{7}{15}\right)$

13) Find the product
    a) $\frac{9}{12} \times \frac{18}{27}$ b) $\frac{3}{10} \times -9$ c) $\frac{-6}{5} \times \frac{9}{11}$

WEEK – 5 : SIMPLE EQUATIONS

1) Write the following statements in the form of equations.

 a) The sum of three times x and 11 is 32.

 b) If you subtract 5 from 6 times a number you get ?

 c) One fourth of m is 3 more than 7.

 d) One third of a number plus 5 is 8.

2) Convert the following equations in statement form.

 a) $x - 5 = 9$ b) $5p = 20$

 c) $3n + 7 = 1$ d) $\dfrac{m}{5} - 2 = 6$

3) Write equations for the following statements.

 a) The sum of numbers x and 4 is 9.

 b) The number b divided by 5 gives 6.

 c) If you add 3 to one-third of z, you get 30.

4) Write the following equations in statement form :

 a) $4p - 2 = 18$

 b) $\dfrac{p}{2} + 2 = 8$

 c) $x^2 + y^2 = 15$

5) Solve the following equations :

 a) $10\,p = 100$ b) $10\,p + 10 = 100$

 c) $\dfrac{3p}{4} = 6$ d) $\dfrac{p}{4} = 5$

 e) $\dfrac{-p}{3} = 6$ f) $3s = -9$

 g) $3q - 6 = 0$ f) $2q + 6 = 12$

WEEK – 6 : SIMPLE EQUATIONS

1) Solution of $2x + 5 = 13$ is _____.

2) If $x = -2$ then $3 + x =$ _____.

3) $20x - 30 = 40$, then $x =$ _____.

4) $p + 5 = 15$, then $p =$ _____.

5) $4p - 2 = 18$, then $p =$ _____.

6) $\dfrac{p}{2} + 2 = 8$, then $p =$ _____.

7) $4(m + 3) = 18$, then $m =$ _____.

8) $-2\,(x + 3) = 8$ then $x =$ _____.

9) $2q + 6 = 12$, then $q =$ _____.

10) $3(n - 5) = -21$, then $n =$ _____.

11) $4 + 5(p - 1) = 34$, then $p =$ _____.

12) $\dfrac{q}{4} + 7 = 5$, then $q =$ _____.

13) Find a number, such that one-fourth of the number of 3 more than 7.

14) $2\,(x + 1) = 0$, then $x =$ _____.

15) $\dfrac{m+6}{4} = 1$ then $m =$ _____.

WEEK – 7 : COMPARING QUANTITIES

1) Convert each ratio to its simplest form.

 a) 14 : 42   b) 0.44 : 88   c) 200 ml : 2L

 d) 750 g : 3 kg   e) 25 min : 5 hrs

2) Check weather the given numbers are in proportion or not.

 a) 2, 4, 5, 10   b) 11, 22, 2, 4   c) 30, 20, 90, 60

3) Express as percent.

 a) $\dfrac{7}{50} =$ b) $\dfrac{9}{100} =$ c) 0.5 =

 d) $\dfrac{11}{20} =$ e) 0.006 =   d) $\dfrac{4}{25} =$

4) Express as a decimal.

   a) 7%   b) 59%   c) 120%   d) 0.9%

   e) 413.2%   f) 8.8%

5) Find the profit or loss percent.

   a) CP = ₹ 500; Profit = ₹ 250

   b) SP = ₹ 630; loss = ₹ 70

   c) CP = ₹ 50; Loss = ₹ 18

6) Express as a fraction :

   a) 63%   b) 16%   c) 2.5%   d) 0.5%

7) Express as a decimal :

   a) 7%   b) 59%   c) 8.8%   d) 120%

8) What is 15% of ₹ 1000.

9) What percent of 1 km is 25 m ?

10) Find the number whose 8% is 72.

11) Write base and power for the given.

   a) 2^3 b) $(-7)^4$ c) $(-1)^1$ d) $(-b)^k$

12) Express in the exponential form.

   a) 9 x 9 x 9 x 9   b) (−5) x (−5) x (−5)

   c) p x p x q x q x q   d) $\left(\dfrac{1}{2}\right) \times \left(\dfrac{-1}{2}\right) \times \left(\dfrac{-1}{2}\right) \times \left(\dfrac{-1}{2}\right)$

13) Write true or false :

   a) $(-5)^3$ is less than $(-5)^8$

   b) The reciprocal of $\left(\dfrac{3}{4}\right)^7$ is $\left(\dfrac{4}{3}\right)^7$.

   c) $(-10)^5$ is positive.

   d) $0^{100} + 1^{100} = 0$

   e) $(11)^{11} \times (0)^{77} = 77$

14) Write in exponential form.

   a) $2^6 \times 2^4$

   b) $12^x \times 12^9$

   c) $[(13)^4]^2$

   d) $8^{10} \div 8^{15}$

   e) $3^2 \times 3^0 \times 3^3$

15) Evaluate :

   a) 9^0 = _____

   b) $3^2 + 2^0$ = _____

   c) $1^0 + 1^0 + 1^0$ = _____

   d) $0^{13} \times 13^0$ = _____

   e) $3^2 \times 2^0$ = _____.