**The City School**

**E-worksheet**

**Teacher: Ayesha Maqsood** **Class: 9** **Date: 5th January 2018**

Q1: Fill in the blanks:

1. Simplified form of 64$x^{3}y^{5}$ $÷$ 8$x^{2}y^{2}$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Make p the subject of formula, 5p – 7 = 3q \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The LCM of $\frac{1}{xy^{2}z} - \frac{1}{xyz^{2}}+ \frac{1}{x^{2}y^{2}}$ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q2: (a) Simplify the following expressions:

1. $\frac{36xy^{2}}{108x^{2} y}$ ii) $\frac{8y}{26(w-x)^{2}}÷\frac{32}{4(w-x)}$

(b) $\frac{2x}{x-y}- \frac{3x}{x+y}$

Q3: (a) Simplify: $\frac{81b^{2}}{5a^{3}c^{2}} ÷ \frac{9b^{2}}{5a^{2}c^{5}} × \frac{18a^{3}b}{36a^{2}c^{2}}$

 (b) Make $x $ the subject of formula $\frac{b-x}{a}= \frac{x}{c}$

Q4: (a) Given that$ uv-t^{2 }= y^{2}$. Make $v $the subject of formula.

 (b) Express as a single denominator $\frac{4}{(x-1)^{2}}+ \frac{5}{x-1}$

Q5: Solve the given equations:

1. $\frac{3x+4}{2}$ =$ x-2$
2. $\frac{3x-4}{10}+ \frac{2x-3}{15} $= 2
3. $\frac{7}{2x-1}= \frac{3}{x-4}$
4. $\frac{3(x-1)}{2}- \frac{2x}{3}=0$