Teacher Name: Ambreen Badar Class: 9 Subject: Mathematics Date: 12th Jan’ 2018

Worksheet based on Paper – 1

Q1: If y is inversely proportional to x2 and y = 8 when x = 2, Find the value of y when x = 4.

Q2: Given that *p* is directly proportional to 2*q* + 1 and *p* = 24, find *p* when *q* = 12.

Q3: Simplify (2x3$y^{\frac{1}{2}}$)3 ÷ 4x2$y^{\frac{1}{2}}$ .

Q4: Express fraction with a single denominator.

 $\frac{5a}{a-9}+ \frac{a^{2}- 2a+1}{a^{2}-12a+27}- \frac{6a}{a-3}$.

Q5: If the circumference of a circle is 88cm, calculate its area.

Q6: Sara sets out on a journey at 10: 50 a.m. She travels 65 km at an average speed of 20 km/hr. At what time does she complete her journey?

Q7: Find the simple interest on $200 for 4 years at 6%per year.

Q8: A television priced at $500 is sold $400. Find the percentage discount.

Q9: The angles of a triangle are in the ratio 3: 4: 5. Calculate the smallest angle in the triangle.

Q10: (a) A rectangle based pyramid has a volume of 3000 cm3. If area of base is 600 cm2, find its height.

(b) Calculate the surface area of a cube if its volume is 729 cm3.

Q11: (a) Simplify; 3x-2 $×$ 7x-5

 (b) Solve; (7 – 2x) (4 + 3x) = 0

Q12: Carrots cost 50 cents per kilogram. Ali paid $1.75 for a bag of carrots. How many kilogram did he buy?