# DELHI PUBLIC SCHOOL, JAMMU <br> ASSIGNMENT-I <br> SESSION:2018-19 

Class- VIII
Subject: Maths

## SECTION A

1. Factorise
(i) $12 a^{2} b^{2}-24 a^{2} b^{2} c^{2}+8 b$
(ii) $\mathrm{a}(\mathrm{x}-\mathrm{y})+\mathrm{b}(\mathrm{y}-\mathrm{x})+\mathrm{c}(\mathrm{x}-\mathrm{y})$
(iii) $5(x-y)^{2}-10(y-x)$
(iv) $\quad \mathrm{ab}(\mathrm{p}-1)-\mathrm{ac}(\mathrm{p}-1)$
(v) $\quad(a-b)(2 b+3)+(a-b)(2 b-3)$
2. Factorise
(i) $\mathrm{ab}-3 \mathrm{~b}+3 \mathrm{c}-\mathrm{ac}$
(ii) $(x+2 y)^{2}-4 x-8 y$
(iii) $25 y^{2}-x^{2}$
3. Express the following percentage as fraction a ratio and a decimal.
(i) $42 \%$
(ii) $65 \%$
4. Convert a ratio into percentage
(i) $2: 5$
(ii) $3: 5$
5. Find
(i) $24 \%$ of 650
(ii) $75 \%$ of 400
6. Solve
(i) $2 x-5=3 x+5$
(ii) $7-\frac{x}{3}=4-\mathrm{x}$
(iii) $3 t+\frac{7}{5}=\frac{2}{5}+5 t$
(iv) $2 m-\frac{3}{5}=m+\frac{4}{5}$

## SECTION B

1. Solve
(i) $\frac{4 x-3}{2 x+1}=\frac{5}{7}$
(ii) $\frac{5 x-7}{x+1}=2$
(iii) $\frac{2}{3 x}-\frac{1}{12}=\frac{3}{2 x}$
2. Two no's are in ratio $4: 5$ if 6 is added to the first number and 8 to the other number, the ratio becomes $11: 14$, find the numbers.
3. The sum of three consecutive multiplies of 3 is 333 . Find the multiples.
4. The sum of two numbers is 43 . Their difference is 13 . Find the numbers.
5. Three consecutive integers add upto 54. What are the integers?
6. Suresh got $70 \%$ marks in the examination if he obtained 525 marks. Find the maximum marks.
7. Ashish's monthly income is Rs. 9600. His monthly expenditure is $60 \%$. What is his saving per month.
8. By selling a cricket bat for Rs 570, a shopkeeper looses $5 \%$. For how much should he sell the cricket bat to gain $6 \%$ ?
9. Find the product
(i) $(y+4)(y-4)$
(ii) $(3 x+2 z)(3 y-2 z)$
10. Multiply using identity
(i) $(2 a-3 b)^{2}$
(ii) $(9 z+2)(9 z-2)$
(iii) $(4 y+3 z)^{2}$

# DELHI PUBLIC SCHOOL, JAMMU <br> ASSIGNMENT-II <br> SESSION:2018-19 

1. I purchased a hair dryer for Rs. 5400 including 8\% VAT. Find the price before VAT was added.
2. Divide:
(i) $x^{2}+5 x+6$ by $x+3$
(ii) $3 x^{2}-4 x-4$ by $3 x+2$
(iii) $2 x^{3}+7 x^{2}-9$ by $x+3$
3. Solve and Check:
(i) $2 x+3(x=2)+4(x-4)=-37$
(ii) $\frac{3 x+5}{5}=\frac{x-2}{3}=\frac{5 x-7}{6}$
(iii) $6(3 m-1)+3(2 m+3)=1-7 m$
4. Find the compound interest on Rs 18000 at $10 \%$ per annum for 3 years.
5. I had Rs 924 left, after spending $65 \%$ of my money. How much I had in the beginning?
6. A ceiling fan was purchased for Rs. 650 and Rs. 250 were spent on its repair. Find the selling price if it was sold at a profit of $10 \%$.
7. Solve: $2 m-\frac{3}{5}=m+\frac{4}{5}$
8. $\frac{3 x+5}{3-2 x}=\frac{5}{3}$

# DELHI PUBLIC SCHOOL, JAMMU ASSIGNMENT-III <br> SESSION:2018-19 

1. A man bought two computers for Rs. 45000 . He sold one at a loss of $5 \%$ and the other at a profit of $5 \%$. If the selling price of each set is same, find the cost price of each set.
2. I purchased a washing machine having the marked price of Rs 13000. The dealer offered a discount of $10 \%$ and VAT was charged at the rate of $10 \%$. How much amount I had to pay to the dealer.
3. Meena deposited Rs. 8000 in Post Office which pays her 12\% interest compounded quarterly. What is the amount which she receives after nine months?
4. The population of a town is increasing at the rate of $10 \%$ per annum. What will be the population of the town at this rate after two years, if the present population is 42000 ?
5. Factories: $9 x^{2}-30 x+25-4 y^{2}$
6. Divide $x^{2}+5 x-24$ by $(x+8)$.
7. Factories: $x^{8}-y^{8}$
8. Factories: $a^{4}-(2 b+c)^{4}$
9. The numerator of a given fraction is 4 less than its denominator. If 3 is subtracted from the numerator and 5 is added to the denominator, the fraction becomes $1 / 4$. What is the given fraction?
10. The digit at the tens place of a two digit number is three times the digit at the ones place. If the sum of the number and the number formed by severing its digits is 88 , find the number.
11. Solve and check your answer.

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\frac{m}{2}+6=m-8
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12. Solve : $\frac{7 x+4}{x+2}=\frac{-4}{3}$
