## Worksheet Grade 8

## Linear Equation in One Variable

Q1) Solve
a) $\frac{2}{3}(x-5)-\frac{1}{4}(x-2)=\frac{9}{2}$
b) $\frac{3 a-2}{3}+\frac{2 a+3}{2}=a+\frac{7}{6}$
c) $[(2 x+3)+(x+5)]^{2}+[(2 x+3)-(x+5)]^{2}=10 x^{2}+92$
d) $\frac{2 x+5}{3}=3 x-10$
e) $\frac{2 x-3}{3 x+2}=-\frac{2}{3}$

Q2) Kanchan is three years older than Gunjan. Six years ago, Kanchan's age was four times Gunjan's age. Find the ages of Kanchan and Gunjan.

Q3) A number is such that it is as much greater than 84 as it is less than 108 . Find it.

Q4) Divide 34 into two parts in such a way that $\left(\frac{4}{7}\right)^{\text {th }}$ of one part is equal to $\left(\frac{2}{5}\right)^{t h}$ of the other.

Q5) The Numerator of a fraction is 4 less than the denominator. If 1 is added to the both its numerator and denominator, it becomes $1 / 2$. Find the fraction.

Q6) A number consists of two digits whose sum 9 . If 27 is added to the number its digits are reversed. Find the number.

## Answer Key

A1)
a) $\frac{88}{5}$
b) $\frac{1}{3}$ c) $\frac{6}{11}$
d) 5
e) $\frac{5}{12}$

A2) Kanchan 10yrs Gunjan 7yrs
A3) 96
A4) 14,20
A5) $\frac{3}{7}$
A6) 36,63

