

INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2024-25

CLASS: 7 / SUBJECT: Maths

LESSON : 4 Simple Equations

1. Make equations for given statements :
 - (a) 4 less from thrice a number m is 14.
 - (b) A number x divided by 4 gives 3.
 - (c) 7 less than a number x is 4.
 - (d) Four fifth of a number is greater than three fourth of the number by 4.
 - (e) x exceeds 3 by 7
 - (f) 7 added to a number p gives 18
 - (g) Three fourth of a number plus 2 gives 10
 - (h) If you subtract 6 from 5 times a number, you get 29
 - (i) 3 is added to a number m and the result is multiplied by 4 to get 20

2. Solve the following equations by trial and error method
 - i. $X-1=5$
 - ii. $2y=16$
 - iii. $19=2x+3$

3. Write the following equations in statement forms:
 - i. $x+10=18$
 - ii. $2m-1=9$
 - iii. $3(z-1)=12$
 - iv. $\frac{x}{4}+3=7$

4. Set up an equation and solve the following case:-
 - i. Add 7 to 3 times a number, you get 34. Find the number. ($x = 9$)
 - ii. Subtract 23 from thrice a number the result is 7. find the number. ($x = 10$)
 - iii. Anmol's mother is 4 years more than 3 times Anmol's age. Find Anmol's age if mother is 40 years old. (12 years)
 - iv. Tony scored twice as many runs as Kohli. Together they scored 6 short of triple century. How many runs did each score? (196, 98).
 - v. The three angles of a triangle are in the ratio 2:3:5. Find the measure of each angle. Classify the triangle. (36, 54, 90), (right angled triangle).
 - vi. Kadir has 3 pencils less than twice the pencils Kamal has. Kadir has 13 pencils. Find the number of pencils with Kamal. (8 pencils)
 - vii. In an isosceles triangle, the vertex angle is twice either base angle. Find the measure of base angle. (45°)

5. Solve the following equations:-

- i. $6x=30$
- ii. $3(x-1)+7=11$
- iii. $m/4 - 7 = 3$
- iv. $5(y-5)=-21$
- v. $2m+1/4=7/4$
- vi. $X-3/2=7/2$
- vii. $-p/4=-2$
- viii. $2x-1/2=3$
- ix. $20-(2x-5)=25$
- x. $3x=15-2x$
- xi. $x/2-3=x/3$
- xii. $x/5+1=x-3$

6. Answer the following:-

- i. Find two consecutive natural numbers whose sum is 85. [42,43]
- ii. 4 more than one-third of a number is 16. Find the number. [36]
- iii. The cost of a book is rupees 25 more than twice the cost of a geometry box. Find the cost of the book, if the total cost is rupees 130. [95]
- iv. In an isosceles triangle, the base angles are equal. The vertex angle is 40 degree. What are the base angles of the triangle? [70]
- v. Kanishka thinks of a number. If she takes away 7 from $5/6$ of that number, the result is 28. Find the number. [42]
- vi. Sarikas father is 25 years older than Sarika. After 10 years he will be twice as old as Sarika. Find their present ages. [40 yrs, 15 yrs]
- vii. The length of a rectangular field is twice its breadth. If the perimeter of the field be 96m, find the dimensions of the field. [16m, 32m]
- viii. Gagan is thinking of a number. When he divides it by 3, and then adds 4, the answer is half the number. Find the number. [24]

ANSWERS

1. a) $3m-4=14$ b) $x/4=3$ c) $x-7=4$ d) $(4/5)x-(3/4)x=4$ e) $x-3=7$
f) $p+7=18$ g) $(3/4)x + 2 = 10$ h) $5x-6=29$ i) $4(m+3)=20$
2. i) $x=6$ ii) $y=8$ iii) $x=11$
3. i) Ten more than x gives eighteen
ii) One subtracted from twice a number gives nine
iii) One is subtracted from a number z and the result is multiplied by three to get twelve.

iv) Three added to one fourth of a number gives 7

5. i) $x=5$ ii) $x=7/3$ iii) $m=40$ iv) $y=4/5$ v) $m=3/4$ vi) $x=5$ vii) $p=8$

viii) $x=7/4$ ix) $x=0$ x) $x=3$ xi) $x=18$ xii) $x=5$