

NCERT Solutions for 7th Class Maths: Chapter 4-Simple Equations



IndCareer
Schools



indCareer



indCareer



indCareer

NCERT Solutions for 7th Class Maths: Chapter 4-Simple Equations

Class 7: Maths Chapter 4 solutions. Complete Class 7 Maths Chapter 4 Notes.

NCERT Solutions for 7th Class Maths: Chapter 4-Simple Equations

NCERT 7th Maths Chapter 4, class 7 Maths Chapter 4 solutions

Page No: 81

Exercise 4.1

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

1. Complete the last column of the table:

S. No.	Equation	Value	Say, whether the Equation is satisfied. (Yes / No)
1	$x+3=0$	$x=3$	
2	$x+3=0$	$x=0$	
3	$x+3=0$	$x=-3$	
4	$x-7=1$	$x=7$	
5	$x-7=1$	$x=8$	
6	$5x=25$	$x=0$	
7	$5x=25$	$x=5$	
8	$5x=25$	$x=-5$	
9	$m/3=2$	$m=-6$	
10	$m/3=2$	$m=0$	
11	$m/3=2$	$m=6$	

Answer

S. No.	Equation	Value	Say, whether the Equation is satisfied. (Yes / No)
1	$x+3=0$	$x=3$	No
2	$x+3=0$	$x=0$	No
3	$x+3=0$	$x=-3$	Yes
4	$x-7=1$	$x=7$	No

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

5	$x-7=1$	$x=8$	Yes
6	$5x=25$	$x=0$	No
7	$5x=25$	$x=5$	Yes
8	$5x=25$	$x=-5$	No
9	$m/3=2$	$m=-6$	No
10	$m/3=2$	$m=0$	No
11	$m/3=2$	$m=6$	Yes

2. Check whether the value given in the brackets is a solution to the given equation or not:

(a) $n+5=19(n=1)$

(b) $7n+5=19(n=-2)$

(c) $7n+5=19(n=2)$

(d) $4p-3=13(p=1)$

(e) $4p-3=13(p=-4)$

(f) $4p-3=13(p=0)$

Answer

(a) $n+5=19(n=1)$

Putting $n=1$ in L.H.S.,

$$1 + 5 = 6$$

\therefore L.H.S. \neq R.H.S.,

\therefore $n=1$ is not the solution of given equation.

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

(b) $7n+5=19(n=-2)$

Putting $n=-2$ in L.H.S.,

$$7(-2)+5=-14+5=-9$$

\therefore L.H.S. \neq R.H.S.,

\therefore $n=-2$ is not the solution of given equation.

(c) $7n+5=19(n=2)$

Putting $n=2$ in L.H.S.,

$$7(2)+5=14+5=19$$

\therefore L.H.S. = R.H.S.,

\therefore $n=2$ is the solution of given equation.

(d) $4p-3=13(p=1)$

Putting $p=1$ in L.H.S.,

$$4(1)-3=4-3=1$$

\therefore L.H.S. \neq R.H.S.,

\therefore $p=1$ is not the solution of given equation.

(e) $4p-3=13(p=-4)$

Putting $p=-4$ in L.H.S.,

$$4(-4)-3=-16-3=-19$$

\therefore L.H.S. \neq R.H.S.,

\therefore $p=-4$ is not the solution of given equation.

(f) $4p-3=13(p=0)$

Putting $p=0$ in L.H.S.,

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$4(0)-3=0-3=-3$$

\therefore L.H.S. \neq R.H.S.,

\therefore $p=0$ is not the solution of given equation.

3. Solve the following equations by trial and error method:

(i) $5p+2=17$

(ii) $3m-14=4$

Answer

(i) $5p+2=17$

Putting $p=-3$ in L.H.S. $5(-3)+2 = -15+2=-13$

$\therefore -13 \neq 17$

Therefore, $p=-3$ is not the solution.

Putting $p=-2$ in L.H.S. $5(-2)+2=-10+2=-8$

$\therefore -8 \neq 17$

Therefore, $p=-2$ is not the solution.

Putting $p=-1$ in L.H.S. $5(-1)+2=-5+2=-3$

$\therefore -3 \neq 17$

Therefore, $p=-1$ is not the solution.

Putting $p=0$ in L.H.S. $5(0)+2=0+2=2$

$\therefore 2 \neq 17$

Therefore, $p=0$ is not the solution.

Putting $p=1$ in L.H.S. $5(1)+2=5+2=7$

$\therefore 7 \neq 17$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

Therefore, $p=1$ is not the solution.

Putting $p=2$ in L.H.S. $5(2)+2=10+2=12$

$$\therefore 12 \neq 17$$

Therefore, $p=2$ is not the solution.

Putting $p=3$ in L.H.S. $5(3)+2=15+2=17$

$$\therefore 17=17$$

Therefore, $p=3$ is the solution.

$$(ii) 3m-14=4$$

Putting $m=-2$ in L.H.S. $3(-2)-14=-6-14=-20$

$$\therefore -20 \neq 4$$

Therefore, $m=-2$ is not the solution.

Putting $m=-1$ in L.H.S. $3(-1)-14=-3-14=-17$

$$\therefore -17 \neq 4$$

Therefore, $m=-1$ is not the solution.

Putting $m=0$ in L.H.S. $3(0)-14=0-14=-14$

$$\therefore -14 \neq 4$$

Therefore, $m=0$ is not the solution.

Putting $m=1$ in L.H.S. $3(1)-14=3-14=-11$

$$\therefore -11 \neq 4$$

Therefore, $m=1$ is not the solution.

Putting $m=2$ in L.H.S. $3(2)-14=6-14=-8$

$$\therefore -8 \neq 4$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

Therefore, $m=2$ is not the solution.

Putting $m=3$ in L.H.S. $3(3)-14=9-14=-5$

$$\therefore -5 \neq 4$$

Therefore, $m=3$ is not the solution.

Putting $m=4$ in L.H.S. $3(4)-14=12-14=-2$

$$\therefore -2 \neq 4$$

Therefore, $m=4$ is not the solution.

Putting $m=5$ in L.H.S. $3(5)-14=15-14=1$

$$\therefore 1 \neq 4$$

Therefore, $m=5$ is not the solution.

Putting $m=6$ in L.H.S. $3(6)-14=18-14=4$

$$\therefore 4=4$$

Therefore, $m = 6$ is the solution.

4. Write equations for the following statements:

(i) The sum of numbers x and 4 is 9.

(ii) 2 subtracted from y is 8.

(iii) Ten times a is 70.

(iv) The number b divided by 5 gives 6.

(v) Three-fourth of t is 15.

(vi) Seven times m plus 7 gets you 7.

(vii) One-fourth of a number x minus 4 gives 4.

(viii) If you take away 6 from 6 times y , you get 60.

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

(ix) If you add 3 to one-third of z, you get 30.

Answer

(i) $x+4=9$

(ii) $y-2=8$

(iii) $10a=70$

(iv) $b/5=6$

(v) $3/4.t=15$

(vi) $7m+7=77$

(vii) $x/4-4=4$

(viii) $6y-6=60$

(ix) $z/3+3=30$

5. Write the following equations in statement form:

(i) $p+4=15$

(ii) $m-7=3$

(iii) $2m=7$

(iv) $m/5=3$

(v) $3m/5=6$

(vi) $3p+4=25$

(vii) $4p-2=18$

(viii) $p/2+2=8$

Answer

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

- (i) The sum of numbers p and 4 is 15.
- (ii) 7 subtracted from m is 3.
- (iii) Two times m is 7.
- (iv) The number m is divided by 5 gives 3.
- (v) Three-fifth of the number m is 6.
- (vi) Three times p plus 4 gets 25.
- (vii) If you take away 2 from 4 times p , you get 18.
- (viii) If you added 2 to half is p , you get 8.

NCERT 7th Maths Chapter 4, class 7 Maths Chapter 4 solutions

6. Set up an equation in the following cases:

- (i) Irfan says that he has 7 marbles more than five times the marbles Parmit has. Irfan has 37 marbles. (Take m to be the number of Parmit's marbles.)**
- (ii) Laxmi's father is 49 years old. He is 4 years older than three times Laxmi's age. (Take Laxmi's age to be y years.)**
- (iii) The teacher tells the class that the highest marks obtained by a student in her class are twice the lowest marks plus 7. The highest score is 87. (Take the lowest score to be l .)**
- (iv) In an isosceles triangle, the vertex angle is twice either base angle. (Let the base angle be b in degrees. Remember that the sum of angles of a triangle is 180° .)**

Answer

- (i) Let m be the number of Parmit's marbles.

$$\therefore 5m+7=37$$

- (ii) Let the age of Laxmi be y years.

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\therefore 3y+4=49$$

(iii) Let the lowest score be l .

$$\therefore 2l+7=87$$

(iv) Let the base angle of the isosceles triangle be b , so vertex angle = $2b$

$$\therefore 2b+b+b=180^\circ$$

$$\Rightarrow 4b=180^\circ \text{ [Angle sum property of a } \Delta \text{]}$$

NCERT 7th Maths Chapter 4, class 7 Maths Chapter 4 solutions

Page No. 86

Exercise 4.2

1. Give first the step you will use to separate the variable and then solve the equations:

(a) $x-1=0$

(b) $x+1=0$

(c) $x-1=5$

(d) $x+6=2$

(e) $y-4=-7$

(f) $y-4=4$

(g) $y+4=4$

(h) $y+4=-4$

Answer

(a) $x-1=0$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\Rightarrow x-1+1=0+1 \text{ [Adding 1 both sides]}$$

$$\Rightarrow x=1$$

$$\Rightarrow x+1-1=0-1 \text{ [Subtracting 1 both sides]}$$

$$\Rightarrow x=-1$$

$$\Rightarrow x-1+1=5+1 \text{ [Adding 1 both sides]}$$

$$\Rightarrow x=6$$

$$\Rightarrow x+6-6=2-6 \text{ [Subtracting 6 both sides]}$$

$$\Rightarrow x=-4$$

$$\Rightarrow y-4+4=-7+4 \text{ [Adding 4 both sides]}$$

$$\Rightarrow y=-3$$

$$\Rightarrow y-4+4=4+4 \text{ [Adding 4 both sides]}$$

$$\Rightarrow y=8$$

$$\Rightarrow y+4-4=4-4 \text{ [Subtracting 4 both sides]}$$

$$\Rightarrow y=0$$

$$\Rightarrow y+4-4=-4-4 \text{ [Subtracting 4 both sides]}$$

$$\Rightarrow y=-8$$

2. Give first the step you will use to separate the variable and then solve the equations

(a) $3l = 42$

(b) $b/2 = 6$

(c) $p/7 = 4$

(d) $4x = 25$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

(e) $8y = 36$

(f) $z/3 = 54$

(g) $a/5 = 7/15$

(h) $20t = -10$

Answer

(a) $3l=42$

$\Rightarrow 3l/3=42/3$ [Dividing both sides by 3]

$\Rightarrow l=14$

$\Rightarrow b/2 \times 2 = 6 \times 2$ [Multiplying both sides by 2]

$\Rightarrow b=12$

$\Rightarrow p/7 \times 7 = 4 \times 7$ [Multiplying both sides by 7]

$\Rightarrow p=28$

$\Rightarrow 4x4=25/4$ [Dividing both sides by 4]

$\Rightarrow x=25/4$

$\Rightarrow 8y/8=36/8$ [Dividing both sides by 8]

$\Rightarrow y=9/2$

$\Rightarrow z/3 \times 3 = 5/4 \times 3$ [Multiplying both sides by 3]

$\Rightarrow z=15/4$

$\Rightarrow a/5 \times 5 = 7/15 \times 5$ [Multiplying both sides by 5]

$\Rightarrow a=73$

$\Rightarrow 20t/20 = -10/20$ [Dividing both sides by 20]

$\Rightarrow t = -1/2$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

3. Give first the step you will use to separate the variable and then solve the equations

(a) $3n-2=46$

(b) $5m+7=17$

(c) $20p/3=40$

(d) $3p/10=6$

Step I: $3n-2+2=46+2=48$

[Adding 2 both sides]

Step II: $3n/3=48/3$

$\Rightarrow n=16$ [Dividing both sides by 3]

Step I: $5m+7-7=17-7=17-7$

$\Rightarrow 5m=10$ [Subtracting 7 both sides]

Step II: $5m/5=10/5$

$\Rightarrow m=2$ [Dividing both sides by 5]

Step I: $20p/3 \times 3 = 40 \times 3$

$\Rightarrow 20p = 120$ [Multiplying both sides by 3]

Step II: $20p/20=120/20$

$\Rightarrow p=6$ [Dividing both sides by 20]

Step I: $3p/10 \times 10 = 6 \times 10$

$\Rightarrow 3p=60$ [Multiplying both sides by 10]

Step II: $3p/3 = 60/3$

$\Rightarrow p=20$ [Dividing both sides by 3]

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

4. Solve the following equation:

(a) $10p = 100$

(b) $10p + 10 = 100$

(c) $p/4 = 5$

(d) $-p/3 = 5$

(e) $3p/4 = 6$

(f) $3s = -9$

(g) $3s + 12 = 0$

(h) $3s = 0$

(i) $2q = 6$

(j) $2q - 6 = 0$

(k) $2q + 6 = 0$

(l) $2q + 6 = 12$

Answer

(a) $10p = 100$

$$\Rightarrow 10p/10 = 100/10 \text{ [Dividing both sides by 10]}$$

$$\Rightarrow p = 10$$

$$\Rightarrow 10p + 10 - 10 = 100 - 10 \text{ [Subtracting both sides 10]}$$

$$\Rightarrow 10p = 90$$

$$\Rightarrow 10p/10 = 90/10 \text{ [Dividing both sides by 10]}$$

$$\Rightarrow p = 9$$

$$\Rightarrow p/4 \times 4 = 5 \times 4 \text{ [Multiplying both sides by 4]}$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\Rightarrow p = 20$$

$$\Rightarrow -p/3 \times (-3) = 5 \times (-3) \text{ [Multiplying both sides by } -3]$$

$$\Rightarrow p = -15$$

$$\Rightarrow 3p/4 \times 4 = 6 \times 4 \text{ [Multiplying both sides by } 4]$$

$$\Rightarrow 3p = 24$$

$$\Rightarrow 3p/3 = 24/3 \text{ [Dividing both sides by } 3]$$

$$\Rightarrow p = 8$$

$$\Rightarrow 3s/3 = -9/3 \text{ [Dividing both sides by } 3]$$

$$\Rightarrow s = -3$$

$$\Rightarrow 3s + 12 - 12 = 0 - 12 \text{ [Subtracting both sides } 12]$$

$$\Rightarrow 3s = -12$$

$$\Rightarrow 3s/3 = -12/3 \text{ [Dividing both sides by } 3]$$

$$\Rightarrow s = -4$$

$$\Rightarrow 3s/3 = 0/3 \text{ [Dividing both sides by } 3]$$

$$\Rightarrow s = 0$$

$$\Rightarrow 2q/2 = 6/2 \text{ [Dividing both sides by } 2]$$

$$\Rightarrow q = 3$$

$$\Rightarrow 2q - 6 + 6 = 0 + 6 \text{ [Adding both sides } 6]$$

$$\Rightarrow 2q = 6$$

$$\Rightarrow 2q/2 = 6/2 \text{ [Dividing both sides by } 2]$$

$$\Rightarrow q = 3$$

$$\Rightarrow 2q + 6 - 6 = 0 - 6 \text{ [Subtracting both sides } 6]$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\Rightarrow 2q = -6$$

$$\Rightarrow 2q/2 = -6/2 \text{ [Dividing both sides by 2]}$$

$$\Rightarrow q = -3$$

$$\Rightarrow 2q+6-6 = 12-6 \text{ [Subtracting both sides 6]}$$

$$\Rightarrow 2q = 6$$

$$\Rightarrow 2q/2 = 6/2 \text{ [Dividing both sides by 2]}$$

$$\Rightarrow q = 3$$

Page No. 89

Exercise 4.3

1. Solve the following equations:

(a) $2y + 5/2 = 37/2$

(b) $5t + 28 = 10$

(c) $a/5 + 3 = 2$

(d) $q/4 + 7 = 5$

(e) $5/2 x = 10$

(f) $5/2 x = 25/4$

(g) $7m + 19/2 = 13$

(h) $6z + 10 = -2$

(i) $3l/2 = 2/3$

(j) $2b/3 - 5 = 3$

Answer

(a) $2y + 5/2 = 37/2$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\Rightarrow 2y = 37/2 - 5/2$$

$$\Rightarrow 2y = 37 - 5/2$$

$$\Rightarrow 2y = 32/2$$

$$\Rightarrow 2y = 16/2$$

$$\Rightarrow y = 8$$

$$\Rightarrow 5t = 10 - 28$$

$$\Rightarrow 5t = -18$$

$$\Rightarrow t = -18/5$$

$$\Rightarrow a/5 = 2 - 3 \Rightarrow a/5 = -1$$

$$\Rightarrow a = -1 \times 5$$

$$\Rightarrow a = -5$$

$$\Rightarrow q/4 = 5 - 7$$

$$\Rightarrow q/4 = -2$$

$$\Rightarrow q = -2 \times 4$$

$$\Rightarrow q = -8$$

$$\Rightarrow 5x = 10 \times 2$$

$$\Rightarrow 5x = 20$$

$$\Rightarrow x = 20/5$$

$$\Rightarrow x = 4$$

$$\Rightarrow 5x = 25/4 \times 2 \text{ [Multiplying both sides by 2]}$$

$$\Rightarrow 5x = 25/2$$

$$\Rightarrow x = 25/(2 \times 5)$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\Rightarrow x = 5/2$$

$$\Rightarrow 7m = 13 - 19/2$$

$$\Rightarrow 7m = 26 - 19/2$$

$$\Rightarrow 7m = 7/2$$

$$\Rightarrow m = 7/(2 \times 7)$$

$$\Rightarrow m = 1/2$$

$$(h) 6z + 10 = -2$$

$$\Rightarrow 6z = -2 - 10$$

$$\Rightarrow 6z = -12$$

$$\Rightarrow z = -12/6$$

$$\Rightarrow z = -2$$

$$\Rightarrow 3l = 2/3 \times 2$$

$$\Rightarrow 3l = 4/3$$

$$\Rightarrow l = 4/3 \times 3$$

$$\Rightarrow l = 4$$

$$\Rightarrow 2b/3 = 3 + 5$$

$$\Rightarrow 2b/3 = 8$$

$$\Rightarrow 2b = 8 \times 3$$

$$\Rightarrow 2b = 24$$

$$\Rightarrow b = 24/2$$

$$\Rightarrow b = 12$$

2. Solve the following equations:

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

(a) $2(x+4)=12$

(b) $3(n-5)=21$

(c) $3(n-5)=-21$

(d) $3-2(2-y)=7$

(e) $-4(2-x)=9$

(f) $4(2-x)=9$

(g) $4+5(p-1)=34$

(h) $34-5(p-1)=4$

Answer

(a) $2(x+4) = 12$

$\Rightarrow x+4 = 12/2$

$\Rightarrow x+4 = 6$

$\Rightarrow x = 6-4$

$\Rightarrow x = 2$

$\Rightarrow n-5 = 21/3$

$\Rightarrow n-5 = 7$

$\Rightarrow n = 7+5$

$\Rightarrow n = 12$

$\Rightarrow n-5 = -21/3$

$\Rightarrow n-5 = -7$

$\Rightarrow n = -7+5$

$\Rightarrow n = -2$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\Rightarrow -2(2-y) = 7-3$$

$$\Rightarrow -2(2-y) = 4$$

$$\Rightarrow 2-y = 4/-2$$

$$\Rightarrow 2-y = -2$$

$$\Rightarrow -y = -2-2$$

$$\Rightarrow -y = -4$$

$$\Rightarrow y = 4$$

$$\Rightarrow -4 \times 2 - x \times (-4) = 9$$

$$\Rightarrow -8 + 4x = 9$$

$$\Rightarrow 4x = 9+8$$

$$\Rightarrow 4x = 17$$

$$\Rightarrow x = 17/4$$

$$\Rightarrow 4 \times 2 - x \times (4) = 9$$

$$\Rightarrow 8-4x = 9$$

$$\Rightarrow -4x = 9-8$$

$$\Rightarrow -4x = 1$$

$$\Rightarrow x = -1/4$$

$$\Rightarrow 5(p-1) = 34-4$$

$$\Rightarrow 5(p-1) = 30$$

$$\Rightarrow p-1 = 30/5$$

$$\Rightarrow p-1 = 6$$

$$\Rightarrow p = 6+1$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\Rightarrow p = 7p$$

$$\Rightarrow p = 7$$

$$\Rightarrow -5(p-1) = 4-34$$

$$\Rightarrow -5(p-1) = -30$$

$$\Rightarrow p-1 = -30/-5$$

$$\Rightarrow p-1 = 6$$

$$\Rightarrow p = 6+1$$

$$\Rightarrow p = 7$$

3. Solve the following equations:

(a) $4=5(p-2)$

(b) $-4=5(p-2)$

(c) $-16=-5(2-p)$

(d) $10 = 4 + 3(t+2)$

(e) $28 = 4 + 3(t+5)$

(f) $0 = 16 + 4(m-6)$

Answer

(a) $4 = 5(p-2)$

$$\Rightarrow 4 = 5p - 10$$

$$\Rightarrow 5p - 10 = 4$$

$$\Rightarrow 5p = 4+10$$

$$\Rightarrow p = 14/5$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$(b) -4 = 5(p-2)$$

$$\Rightarrow -4 = 5p - 10$$

$$\Rightarrow 5p - 10 = -4$$

$$\Rightarrow 5p = -4 + 10$$

$$\Rightarrow p = 6/5$$

$$(c) -16 = -5(2-p)$$

$$-16 = -10 + 5p$$

$$\Rightarrow -10 + 5p = -16$$

$$\Rightarrow 5p = -16 + 10$$

$$\Rightarrow p = -6/5$$

$$(d) 10 = 4 + 3(t+2)$$

$$\Rightarrow 10 = 4 + 3t + 6$$

$$\Rightarrow 10 = 10 + 3t$$

$$\Rightarrow 10 + 3t = 10$$

$$\Rightarrow 3t = 10 - 10$$

$$\Rightarrow t = 0$$

$$(e) 28 = 4 + 3(t+5)$$

$$\Rightarrow 28 = 4 + 3t + 15$$

$$\Rightarrow 28 = 18 + 3t$$

$$\Rightarrow 18 + 3t = 28$$

$$\Rightarrow 3t = 28 - 18$$

$$\Rightarrow t = 10/3$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$(f) 0 = 16 + 4(m-6)$$

$$\Rightarrow 0 = 16 + 4m - 24$$

$$\Rightarrow -8 + 4m = 0$$

$$\Rightarrow 4m = 8$$

$$\Rightarrow m = 8/4$$

$$\Rightarrow m = 2$$

NCERT 7th Maths Chapter 4, class 7 Maths Chapter 4 solutions

4. (a) Construct 3 equations starting with $x=2$.

(b) Construct 3 equations starting with $x=-2$

Answer

(a) 3 equations starting with $x=2$.

(i) $x=2$

Multiplying both sides by 10, $10x=20$

Adding 2 both sides $10x+2=20+2 = 10x + 2 = 22$

(ii) $x=2$

Multiplying both sides by 5 $5x=10$

Subtracting 3 from both sides $5x-3=10-3 = 5x-3=7$

(iii) $x=2$

Dividing both sides by 5 $x=2/5$

(b) 3 equations starting with $x=-2$.

(i) $x=-2$

Multiplying both sides by 3 $3x=-6$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

(ii) $x = -2$

Multiplying both sides by 3 $3x = -6$

Adding 7 to both sides $3x + 7 = -6 + 7 = 3x + 7 = 1$

(iii) $x = -2$

Multiplying both sides by 3 $3x = -6$

Adding 10 to both sides $3x + 10 = -6 + 10 = 3x + 10 = 4$

NCERT 7th Maths Chapter 4, class 7 Maths Chapter 4 solutions

Page No. 91

Exercise 4.4

1. Set up equations and solve them to find the unknown numbers in the following cases:

(a) Add 4 to eight times a number; you get 60.

(b) One-fifth of a number minus 4 gives 3.

(c) If I take three-fourth of a number and add 3 to it, I get 21.

(d) When I subtracted 11 from twice a number, the result was 15.

(e) Munna subtracts thrice the number of notebooks he has from 50, he finds the result to be 8.

(f) Ibenhal thinks of a number. If she adds 19 to it divides the sum by 5, she will get 8.

(g) Answer thinks of a number. If he takes away 7 from $\frac{5}{2}$ of the number, the result is $\frac{11}{2}$.

Answer

(a) Let the number be x .

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

According to the question, $8x+4=60$

$$\Rightarrow 8x = 60-4$$

$$\Rightarrow 8x = 56$$

$$\Rightarrow x = 56/8$$

(b) Let the number be y.

According to the question, $y/5-4=3$

$$\Rightarrow y/5 = 3+4$$

$$\Rightarrow y/5 = 7$$

$$\Rightarrow y = 7 \times 5$$

$$\Rightarrow y = 35$$

According to the question, $3/4.z+3=21$

$$\Rightarrow 3/4 z = 21-3$$

$$\Rightarrow 3/4 z = 18$$

$$\Rightarrow 3z = 18 \times 4$$

$$\Rightarrow 3z = 72$$

$$\Rightarrow z = 72/3$$

$$\Rightarrow z = 24$$

According to the question, $2x-11=15$

$$\Rightarrow 2x = 15+11$$

$$\Rightarrow 2x = 26$$

$$\Rightarrow x = 26/2$$

$$\Rightarrow x = 13$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

According to the question, $50 - 3m = 8$

$$\Rightarrow -3m = 8 - 50$$

$$\Rightarrow -3m = -42$$

$$\Rightarrow m = -42 / -3$$

$$\Rightarrow m = 14$$

According to the question, $(n + 19) / 5 = 8$

$$\Rightarrow n + 19 = 8 \times 5$$

$$\Rightarrow n + 19 = 40$$

$$\Rightarrow n = 40 - 19$$

$$\Rightarrow n = 21$$

According to the question, $5/2 x - 7 = 11/2$

$$\Rightarrow 5/2 x = 11/2 + 7$$

$$\Rightarrow 5/2 x = (11 + 14) / 2$$

$$\Rightarrow 5/2 x = 25/2$$

$$\Rightarrow 5x = (25 \times 2) / 2$$

$$\Rightarrow 5x = 25$$

$$\Rightarrow x = 25 / 5$$

$$\Rightarrow x = 5$$

2. Solve the following:

(a) The teacher tells the class that the highest marks obtained by a student in her class are twice the lowest marks plus 7. The highest score is 87. What is the lowest score?

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

(b) In an isosceles triangle, the base angles are equal. The vertex angle is 40° . What are the base angles of the triangle? (Remember, the sum of three angles of a triangle is 180° .)

(c) Sachin scored twice as many runs as Rahul. Together, their runs fell two short of a double century. How many runs did each one score?

Answer

(a) Let the lowest marks be y .

According to the question, $2y+7=87$

$$\Rightarrow 2y = 87 - 7$$

$$\Rightarrow 2y = 80$$

$$\Rightarrow y = 80/2$$

$$\Rightarrow y = 40$$

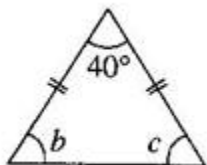
Thus, the lowest score is 40.

(b) Let the base angle of the triangle be b .

Given, $a=40^\circ, b=c$

Since, $a+b+c=180^\circ$ [Angle sum property of a triangle]

$$\Rightarrow 40^\circ + b + b = 180^\circ$$



$$\Rightarrow 40^\circ + 2b = 180^\circ$$

$$\Rightarrow 2b = 180^\circ - 40^\circ$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\Rightarrow 2b = 140^\circ$$

$$\Rightarrow b = 140^\circ/2$$

$$\Rightarrow b = 70^\circ$$

Thus, the base angles of the isosceles triangle are 70° each.

(c) Let the score of Rahul be x runs and Sachin's score is $2x$.

According to the question, $x+2x=198$

$$\Rightarrow 3x = 198$$

$$\Rightarrow x = 198/3$$

$$\Rightarrow x = 66$$

Thus, Rahul's score = 66 runs

And Sachin's score = $2 \times 66 = 132$ runs.

3. Solve the following:

(i) Irfan says that he has 7 marbles more than five times the marbles Parmit has. Irfan has 37 marbles. How many marbles does Parmit have?

(ii) Laxmi's father is 49 years old. He is 4 years older than three times Laxmi's age. What is Laxmi's age?

(iii) People of Sundergram planted a total of 102 trees in the village garden. Some of the trees were fruit trees. The number of non-fruit trees were two more than three times the number of fruit trees. What was the number of fruit trees planted?

Answer

(i) Let the number of marbles Parmit has be m .

According to the question, $5m+7=37$

$$\Rightarrow 5m=37-7$$

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

$$\Rightarrow 5m=30$$

$$\Rightarrow m=30/5$$

$$\Rightarrow m=6$$

Thus, Parmit has 6 marbles.

(ii) Let the age of Laxmi be y years.

Then her father's age = $(3y+4)$ years

According to question, $3y+4=49$

$$\Rightarrow 3y=49-4$$

$$\Rightarrow 3y=45$$

$$\Rightarrow y=45/3$$

$$\Rightarrow y=15$$

Thus, the age of Laxmi is 15 years.

(iii) Let the number of fruit trees be t .

Then the number of non-fruits tree = $3t+2$

According to the question, $t+3t+2 = 102$

$$\Rightarrow 4t+2 = 102$$

$$\Rightarrow 4t = 102-2$$

$$\Rightarrow 4t = 100$$

$$\Rightarrow t = 100/4$$

$$\Rightarrow t = 25$$

Thus, the number of fruit trees are 25.

NCERT 7th Maths Chapter 4, class 7 Maths Chapter 4 solutions

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

4. Solve the following riddle:

I am a number, Tell my identity!

Take me seven times over, And add a fifty!

To reach a triple century, You still need forty!

Answer

Let the number be n .

According to the question, $7n+50+40 = 300$

$$\Rightarrow 7n+90 = 300$$

$$\Rightarrow 7n = 300-90$$

$$\Rightarrow 7n = 210$$

$$\Rightarrow n = 210/7$$

$$\Rightarrow n = 30$$

Thus, the required number is 30.

NCERT 7th Maths Chapter 4, class 7 Maths Chapter 4 solutions



<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

Chapterwise NCERT Solutions for Class 7 Maths :

- Chapter 1 Integers
- Chapter 2 Fractions and Decimals
- Chapter 3 Data Handling
- Chapter 4 Simple Equations
- Chapter 5 Lines and Angles
- Chapter 6 The Triangle and its Properties
- Chapter 7 Congruence of Triangles
- Chapter 8 Comparing Quantities
- Chapter 9 Rational Numbers
- Chapter 10 Practical Geometry
- Chapter 11 Perimeter and Area
- Chapter 12 Algebraic Expressions
- Chapter 13 Exponents and Powers
- Chapter 14 Symmetry
- Chapter 15 Visualising Solid Shapes

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>

About NCERT

The National Council of Educational Research and Training is an autonomous organization of the Government of India which was established in 1961 as a literary, scientific, and charitable Society under the Societies Registration Act. The major objectives of NCERT and its constituent units are to: undertake, promote and coordinate research in areas related to school education; prepare and publish model textbooks, supplementary material, newsletters, journals and develop educational kits, multimedia digital materials, etc. Organise pre-service and in-service training of teachers; develop and disseminate innovative educational techniques and practices; collaborate and network with state educational departments, universities, NGOs and other educational institutions; act as a clearing house for ideas and information in matters related to school education; and act as a nodal agency for achieving the goals of Universalisation of Elementary Education. In addition to research, development, training, extension, publication and dissemination activities, NCERT is an implementation agency for bilateral cultural exchange programmes with other countries in the field of school education. Its headquarters are located at Sri Aurobindo Marg in New Delhi. [Visit the Official NCERT website](https://www.ncert.nic.in/) to learn more.

<https://www.indcareer.com/schools/ncert-solutions-for-7th-class-maths-chapter-4-simple-equations/>