

Linear Equations in One Unknown

Solve the following equations.

1. (a)
$$2m - \frac{1}{5} = m + \frac{1}{20}$$

(b)
$$\frac{4}{7} - \frac{y}{2} = 1$$

2. (a)
$$7m + 6 = 3m - 2$$

(b)
$$28 - 3n = 5n + 4$$

3. (a)
$$5(3h-8)+2=7$$

(b)
$$3(7-2k)+4=-11$$

4. (a)
$$6(5x-2)+12=60$$

(b)
$$12 - (7 - 4x) = 25$$

5. (a)
$$\frac{3n-2}{5} = \frac{1}{2}$$

(b)
$$\frac{5}{3} + \frac{v}{6} = 3$$

6. (a)
$$\frac{k}{4} + 6 = k$$

(b)
$$\frac{3}{8}f + 3 = \frac{7}{8}f - 5$$

7. (a)
$$\frac{x}{5} = -x + 6$$

(b)
$$5 + \frac{2}{3}y = -y$$

- **8.** Given that 3 audio tapes and 2 video tapes together cost \$360. If the cost of the video tapes is 3 times that of the audio tapes. Find the cost of each type of tapes.
- 9. If the sum of two consecutive odd numbers is 32. Find the greater number.

Linear Inequalities in One Unknown
10. Abby and Tim together have \$1200. If Abby gives \$150 to Tim, then they will have the same amount. How much does Tim have originally?
11. Charles's father is now 41 years old. 5 years ago, he was 4 times as old as Charles. Find the present age of Charles.
12. Karen and Zoe buy a present of \$288 to their father and they share the payment. Karen's share is \$18 more than half the share of Zoe. Find Zoe's share.