

Linear Equations

Key Points:

- A linear equation in one variable x is of the form $ax+b=0$, $a \neq 0$
- Solving an equation for a given variables means to isolate the variable on one side of an equation.

Linear Equation Video

Practice Exercises

Solve each equation for the given variable:

1. $2x - 5 = 7$

2. $7(t - 4) = t + 2$

3. $2(y - 4) + 3(y + 5) = 2y - 2$

4. $7x + 5 = 5(x + 3) + 2x$

5. $7p + 13 = 2(2p - 5) + 3p + 23$

6. $\frac{2t}{3} = \frac{t}{6} + 1$

7. $\frac{2x}{3} = 6 - \frac{x}{4}$

8. $\frac{3w+1}{3} - \frac{13}{2} = \frac{1-w}{4}$

Answers:

1. 6

2. 5

3. -3

4. *No Solution*

5. *All real numbers*

6. 2

7. $\frac{72}{11}$

8. $\frac{77}{15}$