



Solving Linear Equations

Solve these equations

Red: Start with me



1. $5a = 21 + 2a$

=
=

2. $2w = 18 - w$

=
=

3. $9g = g + 16$

=
=

4. $2d + 4 = 3d$

=
=

5. $6b = 15 + b$

=
=

6. $3t = 35 - 2t$

=
=

7. $7p = 60 - 3p$

=
=

8. $3f + 24 = 9f$

=
=

Orange: Move onto me



9. $5a = 2a - 9$

=
=

10. $7a = 2a - 35$

=
=

11. $6a - 12 = 8a$

=
=

12. $5d - 4 = 6d$

=
=

13. $3a = 12 + 7a$

=
=

14. $4t = 60 + 10t$

=
=

15. $11p + 54 = 5p$

=
=

16. $5q + 7 = 4q$

=
=

Green: What about me?



17. $3a = 9 + a$

=
=

18. $8 + 2g = 5g$

=
=

19. $22 - 2f = 3f$

=
=

20. $22 + 5k = 8k$

=
=

21. $5t + 7 = 2t$

=
=

22. $12m - 9 = 14m$

=
=

23. $2p + 8 = 5p$

=
=

24. $14 - 3h = 2h$

=
=

Blue: Ultimate Challenge



1. $4x + 3 = 2x + 11$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

6. $4 - 3x = 10 - 5x$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

11. $5x + 7 = 3x + 11$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

16. $2x - 25 = 2 - 7x$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

2. $7x + 4 = 10x - 20$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

7. $5x - 10 = 3x + 2$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

12. $9x + 7 = 15x + 1$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

17. $3x + 2 = x + 12$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

3. $2x - 3 = 3 - 4x$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

8. $12x - 25 = 11 - 7x$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

13. $3x + 4 = 18 - 4x$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

18. $17x - 42 = 2x - 7$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

4. $5x - 4 = 3x + 6$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

9. $6 - 2x = 11 - 7x$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

14. $4 - 5x = 2x - 10$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

19. $1 - x = 9 - 9x$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

5. $5x - 2 = 2x + 4$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

10. $-3x - 5 = x + 15$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

15. $5x - 22 = 8 - 10x$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

20. $14x - 4 = 10x - 20$

$$\begin{array}{c} \boxed{} \\ = \\ \boxed{} \\ = \\ \boxed{} \\ = \end{array}$$

Answers

| Red | Amber | Green | Blue |
|------|---------|---------------------|--------|
| 1. 7 | 9. -3 | 17. 4.5 | 1. 4 |
| 2. 6 | 10. -7 | 18. $2\frac{2}{3}$ | 2. 8 |
| 3. 2 | 11. -6 | 19. $4\frac{2}{5}$ | 3. 1 |
| 4. 4 | 12. -4 | 20. $7\frac{1}{3}$ | 4. 5 |
| 5. 3 | 13. -3 | 21. $-2\frac{1}{3}$ | 5. 2 |
| 6. 7 | 14. -10 | 22. $-4\frac{1}{2}$ | 6. 3 |
| 7. 6 | 15. -9 | 23. $2\frac{2}{3}$ | 7. 6 |
| 8. 4 | 16. -7 | 24. $2\frac{4}{5}$ | 8. 3 |
| | | | 9. 1 |
| | | | 10. -5 |
| | | | 11. 2 |
| | | | 12. 1 |
| | | | 13. 2 |
| | | | 14. 2 |
| | | | 15. 2 |
| | | | 16. 3 |
| | | | 17. 5 |
| | | | 18. 7 |
| | | | 19. 1 |
| | | | 20. -4 |