

Solving Linear Equations

Directions: Solve problems 1-20. State no solution or infinitely many solutions when appropriate. For problems 21-26, create an equation that satisfies the condition.

1. $x+9=21$

2. $5a=35$

3. $y-8=-3$

4. $3x+7=25$

5. $2m-5=17$

6. $-4r+6=18$

7. $4(x+2)=28$

8. $3(2a-1)=21$

9. $2(y+5)+3y=20$

10. $5m-2(2m-3)=18$

11. $7x-4=4x+17$

12. $2a+9=5a-6$

13. $3(p+2)=p+14$

14. $4n-7=4n-7$

15. $6y+5=6y-8$

16. $5(x-2)+3=5x-7$

17. $-2(3q-4)+5q=11$

18. $8-3(t+2)=2$

19. $4(z-1)+2z=20$

20. $7w-5=3(2w+1)$

21. Create an equation whose solution is $x=4$.

22. Create an equation with no solution.

23. Create an equation with infinitely many solutions.

24. Create a two-step equation whose solution is negative.

25. Create an equation with variables on both sides and solution $x=-2$.

26. Create a distribution equation that has infinitely many solutions.