Solve each of the following. Be sure to put answers in set notation.

Name _____

1. $(3x+5)(2x-11)=0$

2. $w(w-4)(3w+2)=0$

3. $3j(2j-9)(4j+5)=0$

4. $4(d-2)(d+2)=0$

5. $3f(2f-5)(3f+1)=0$

6. $y^2+13y+40=0$

7. $2m^2+13m=24$

8. $25r^2+4=20r$

9. $2a^2-98=0$

10. $5b^3+34b^2=7b$

11. $6z^2+5=-17z$

12. $y^2-529=0$

13. $2k^3-24k=13k^2$

14. $\frac{3}{4}a^2+\frac{7}{8}a-a=0$

15. $\frac{1}{12}x^2-\frac{2}{3}x-4=0$

16. $t^2-\frac{t}{6}=\frac{35}{6}$

17. $\frac{z^2}{12} - \frac{2z}{3} - 4 = 0$

18. $49m^3 - 126m^2 + 81m = 0$

19. $3g^2 - 13g = -14$

20. $15f^2 - 13f + 2 = 0$

21. $(\mathrm{h} - 1)(\mathrm{h} - 1) = 36$

22. $(3\mathrm{y} + 2)(\mathrm{y} + 3) = \mathrm{y} + 14$

23. $(2m + 3)(m + 4) = 3m + 6$

24. $7y - 1 = -3y^2 + y - 1$

25. $(2x - 3)(3x + 5) = -3x - 5$

26. $(2\mathrm{b} - 1)(3\mathrm{b} + 7) = 3\mathrm{b}^2 - 2b + 3$

27. $(\mathrm{t} - 5)(\mathrm{t} - 5) = 4$

28. $(4\mathrm{y} - 3)(\mathrm{y} + 2) = y^2 + 18y - 16$