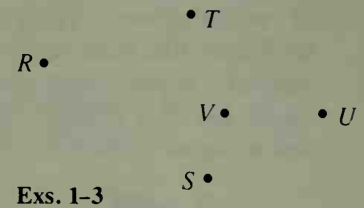
# Self-Test 1

**Name the point that appears to satisfy the description.**

1. Equidistant from $R$ and $S$
2. Equidistant from $S$ and $U$
3. Equidistant from $U$ and $T$

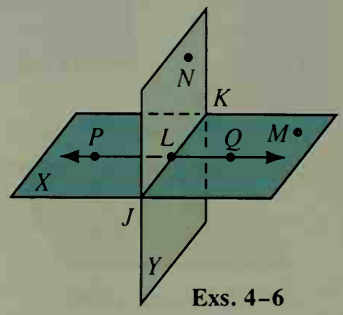


Exs. 1–3

**Classify each statement as true or false.**

4. Plane $Y$ and $\overleftrightarrow{PQ}$ intersect in point $L$.
5. Points $J$, $K$, $L$, and $N$ are coplanar.
6. Points $J$, $L$, and $Q$ are collinear.

7. Draw a vertical plane $Z$ intersecting a horizontal line $l$ in a point $T$.



Exs. 4–6

# Algebra Review: *Linear Equations*

**Find the value of the variable.**

1. $c + 5 = 12$
2. $8 + c = 13$
3. $c - 5 = 12$
4. $7 - z = 13$
5. $15 - z = 0$
6. $4x = 28$
7. $3x = 15$
8. $7x = -35$
9. $-5x = -5$
10. $\frac{1}{3}a = 2$
11. $\frac{3}{4}a = 9$
12. $\frac{4}{5}a = -20$
13. $-2b = 6$
14. $-3b = -9$
15. $-9b = 2$
16. $42 = 6k$
17. $5 = 10k$
18. $-16 = -4k$
19. $12 = \frac{e}{2}$
20. $-9 = \frac{e}{3}$
21. $5 = -\frac{e}{3}$
22. $2p + 5 = 13$
23. $3p - 5 = 13$
24. $4p + 2 = 22$
25. $60 = 6t + 12$
26. $12 = 3r - 9$
27. $55 = 7s - 8$
28. $8x + 2x = 90$
29. $8x - 2x = 90$
30. $x + 9x = 5$
31. $(2g - 15) + g = 9$
32. $3u + (u - 2) = 10$
33. $(w - 20) + 5w = 28$
34. $3x = 2x - 17$
35. $5y = 3y + 26$
36. $7z = 180 - 2z$
37. $12 + 3b = 2 + 5b$
38. $4c + 23 = 9c - 7$
39. $7h + (90 - h) = 210$
40. $5x + (180 - x) = 300$
41. $(4f + 5) + (5f + 40) = 180$
42. $(3g - 4) + (4g + 10) = 90$
43. $2(4d + 4) = d + 1$
44. $2(d + 5) = 3(d - 2)$
45. $180 - x = 3(90 - x)$
46. $3(180 - y) = 2(90 - y)$