For each of the equations in problems 16–25:

a) determine the slope of the graph.

b) determine the y–intercept of the graph.

c) determine the x–intercept of the graph.

d) draw the graph.

16. $y = 2x + 3$
17. $y = 2x + 5$
18. $y = -3x + 6$
19. $2x - 3y = 12$
20. $\frac{x}{3} + \frac{y}{2} = 1$
21. $x = 2y + 4$
22. $\frac{2x}{3} + \frac{3y}{4} = 1$
23. $3x + 2y = 5$
24. $2x - 3y = 0$
25. $4x - 6y = 10$

Written

Factor completely. Some are prime.

1. $x^2 + 16x + 64$
2. $x^2 + x - 6$
3. $12x^2 + 11x + 2$
4. $36a^2 - 49b^2$
5. $a^3 - 8$
6. $a^4 - 81$
7. $4x^2 + 7x - 36$
8. $6x^2 - x - 77$
9. $a^2b^2 + 19a^2b - 42a^2$
10. $16 + a^3b^3$
11. $(a^2 + ac) + (3ab + 3bc)$
12. $(4x^2 - 25y^2) + (2x - 5y)$
13. $p^4 - 17p^2 + 16$
14. $(a + b)^2 + 2(a + b) + 1$
15. $(x + a)(y - b) - (x - a)(y - b)$
16. $(a - 1)(a^2 - 2) + (a - 1)a$
17. $4ab - 4ac - 8b^2 + 8bc$
18. $x^2 - x - 110$
19. $121a^4 - 44a^2 + 4$
20. $10a^2 + 28a - 6$
21. $-1 - a + 6a^2$
22. $a^4 - (a - 2)^2$
23. $16x^4 - 8x^2 + 1$
24. $a^4 - 6a^2 + 9 - 4a^2$
25. $9p^2 - 13p + 4$
26. $(a^2 - 9) - (a^2 - 6a + 9)$

Determine an equation for each of the following lines.

34. The line through (0, 0) with slope –1.
35. The line through (2, 3) with slope –1.
36. The line through (–2, 3) with slope –1.
37. The line through (2, 3) with slope 3.

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