Homework #2

Simplify:

1. $4x \times 3$
2. $5y + 2x - 3y$
3. $2y^2 + 4y + 5y^2$
4. $x^2 \times 12$
5. $4y \times 4y^2$
6. $4k - 3k$
7. $5 + 2k + 2$
8. $x + 2k + 4x$
9. $3k^3 \times 4k^3$
10. $2y^4 + 3y^4$
11. $12y^4 \div 3y^2$
12. $5x^4 \times 2x^2$
13. $3k^2 - 6k^2$
14. $5k \times {}^{-}3g$
15. $3x - 4x$
16. $3f \times g^2$
17. $12y^2 \times 3$
18. $8k^2 - 2k^2$
19. $\frac{20de^2}{4e^3}$
20. $6x - 14x$
21. $k^3 + 2k^3$
22. ${}^{-}2k^3 \times 5k$
23. $3y + 3x + y$
24. $1 \times g^2$
25. $3y \times 4x$
26. $2k - k$
27. ${}^{-}8g \times {}^{-}4g$
28. $2k \times 3y^2$
29. $2y^3 \times 3y^2$
30. $k - 4k$
31. $3k^2 \times 3x^2$
32. $2f \times 3$
33. $4k^3 + 2k^3$
34. $5k^2 \times 4k^3$
35. $2x - 2x$
36. $3x^2 \times x^4$
37. $3x^2 + 4x - x^2$
38. $k \times y^2$
39. $\frac{4xy}{10xyz}$
40. $12y \div 4y$
41. $2y^3 \times 8y$
42. $8x^2 - 2x^2$
43. $6y + 3x + 4y$
44. $4h^2 \div h^2$
45. $3k^2 \times 2kg^4$
46. $2x \times 4x^3$
47. $3x^2 + 2x^2$
48. $4d + 8e - 5e$
49. $4x + 2x$
50. $k^2 \times 4k^2$
51. $y \times x \times 4y$
52. $2a + 2a$
53. $3y^2 + 2y^3 + y^2$
54. $12x^3 \div 2x^2$
55. $y \times 4y^4$
56. $4y^2 - 2y^2$
57. $x \times x$
58. $\frac{10cd^2}{5ad^2}$
59. $4g + a - g$
60. $3xy \times 2x^2$
61. $16k^4 \div 4k$
62. $\frac{x^3}{2x}$
63. $2 \times 3g$
64. $\frac{4y}{8xy^2}$
65. ${}^{-}2k \times 2k^2$
66. $\frac{5x^2}{10x^3}$
67. $1 \times 8e$
68. $\frac{8x^3}{4x^2}$
69. $7y \times 4y^4$
70. $\frac{6xy^3}{8x^3}$
71. $2x^3 \div x$
72. $\frac{4e}{16f}$

Answers Homework #2

Simplify:

1. $4x \times 3 = 12x$
2. $5y + 2x - 3y = 2y + 2x$
3. $2y^2 + 4y + 5y^2 = 7y^2 + 4y$
4. $x^2 \times 12 = 12x^2$
5. $4y \times 4y^2 = 16y^3$
6. $4k - 3k = k$ or $1k$
7. $5 + 2k + 2 = 7 + 2k$
8. $x + 2k + 4x = 5x + 2k$
9. $3k^3 \times 4k^3 = 12k^6$
10. $2y^4 + 3y^4 = 5y^4$
11. $12y^4 \div 3y^2 = 4y^2$
12. $5x^4 \times 2x^2 = 10x^6$
13. $3k^2 - 6k^2 = -3k^2$
14. $5k \times {}^-3g = -15kg$
15. $3x - 4x = -x$ or ${}^-1x$
16. $3f \times g^2 = 3f\,g^2$
17. $12y^2 \times 3 = 36y^2$
18. $8k^2 - 2k^2 = 6k^2$
19. $\frac{20de^2}{4e^3} = \frac{5d}{e}$ (or $5de^{-1}$)
20. $6x - 14x = -8x$
21. $k^3 + 2k^3 = 3k^3$
22. ${}^-2k^3 \times 5k = -10k^4$
23. $3y + 3x + y = 4y + 3x$
24. $1 \times g^2 = g^2$ or $1g^2$
25. $3y \times 4x = 12xy$
26. $2k - k = k$
27. ${}^-8g \times {}^-4g = 32g^2$
28. $2k \times 3y^2 = 6ky^2$
29. $2y^3 \times 3y^2 = 6y^5$
30. $k - 4k = -3k$
31. $3k^2 \times 3x^2 = 9k^2x^2$
32. $2f \times 3 = 6f$
33. $4k^3 + 2k^3 = 6k^3$
34. $5k^2 \times 4k^3 = 20k^5$
35. $2x - 2x = 0$
36. $3x^2 \times x^4 = 3x^6$
37. $3x^2 + 4x - x^2 = 2x^2 + 4x$
38. $k \times y^2 = ky^2$
39. $\frac{4xy}{10xyz} = \frac{2}{5z}$ (or $0.4z^{-1}$)
40. $12y \div 4y = 3$
41. $2y^3 \times 8y = 16y^4$
42. $8x^2 - 2x^2 = 6x^2$
43. $6y + 3x + 4y = 10y + 3x$
44. $4h^2 \div h^2 = 4$
45. $3k^2 \times 2kg^4 = 6k^3g^4$
46. $2x \times 4x^3 = 8x^4$
47. $3x^2 + 2x^2 = 5x^2$
48. $4d + 8e - 5e = 4d + 3e$
49. $4x + 2x = 6x$
50. $k^2 \times 4k^2 = 4k^4$
51. $y \times x \times 4y = 4xy^2$
52. $2a + 2a = 4a$
53. $3y^2 + 2y^3 + y^2 = 4y^2 + 2y^3$
54. $12x^3 \div 2x^2 = 6x$
55. $y \times 4y^4 = 4y^5$
56. $4y^2 - 2y^2 = 2y^2$
57. $x \times x = x^2$
58. $\frac{10cd^2}{5ad^2} = \frac{2c}{a}$ (or $2a^{-1}c$)
59. $4g + a - g = 3g + a$
60. $3xy \times 2x^2 = 6x^3y$
61. $16k^4 \div 4k = 4k^3$
62. $\frac{x^3}{2x} = \frac{x^2}{2}$ (or $\frac{1}{2}x^2$)
63. $2 \times 3g = 6g$
64. $\frac{4y}{8xy^2} = \frac{1}{2xy}$ (or $\frac{1}{2}x^{-1}y^{-1}$)
65. ${}^-2k \times 2k^2 = -4k^3$
66. $\frac{5x^2}{10x^3} = \frac{1}{2x}$ (or $\frac{1}{2}x^{-1}$)
67. $1 \times 8e = 8e$
68. $\frac{8x^3}{4x^2} = 2x$
69. $7y \times 4y^4 = 28y^5$
70. $\frac{6xy^3}{8x^3} = \frac{3y^3}{4x^2}$ (or $0.75y^3x^{-2}$)
71. $2x^3 \div x = 2x^2$
72. $\frac{4e}{16f} = \frac{e}{4f}$ (or $0.25ef^{-1}$)