

Name _____

Date _____

Simplify.

1. $(5xy - 7y + 9x) + (3x + 4y - 4xy)$
2. $(-10n + 15p - 3np) + (13np - 6p + 10n)$
3. $(2c + 9cd - d) + (5c^2 - 8c + 4d)$
4. $(3ab - 3b + 8) + (-8a - 6ab + 4b)$
5. $(2w^3 - 5w - 15) + (-6w^2 + w - 15) + (4w^2 - 7)$
6. $(12x^3 + 13) + (8x^2 - 13x + 19) + (-8x^2 - 32x)$
7. $(9a + b - 12c) + (a - 15c + b) + (5b - 24a + 2c)$
8. $(5p^2 - p + r) + (-7p^2 - 3p - 4r) + (5p^2 - p + 3r)$
9. $(x^2 + 7x + 9y) + (4x^2 + 3xy + 7y) + (7x^2 + xy + 2x)$
10. $(cd - 4c + 6) + (4cd - 9d - 9) + (5c + 14d + 3)$
11. $(-a^2b + a^2 - b) - (-a^2b + 2a^2)$
12. $(2u^2 + 3u - 6) - (-8u + 10)$
13. $(-x^2y - 5xy - 16y) - (7x^2y + 15y)$
14. $(6a^4 - 7a^2) - (-a^3 + a^2 - a)$
15. $(-3r^2t + 8rt^2 - 9r^2t^2) - (-11r^2t - 7rt^2 + 5r^2t^2)$
16. $(-14k^2m + 9km - km^2) - (16k^2m - 4km + km^2)$
17. $(6xy - 4x^2 + 10y) - (-3x^2 - 10y + 6xy)$
18. $(-9a^2 + 8a^3 - 11a) - (9a^3 - 12a + a^2)$
19. $(-3d^2 - 4cd + 8) - (-10 - 4cd + 5d^2)$
20. $(-13w^4 + w^3 + 11w^2) - (2w^3 + w^2 + 4w^4)$
21. $(-y^3 - 4y^2 + 9y - 14) - (7y^3 + 4y^2 - 12y - 9)$
22. $(28a^3 + 23a^2 - 34a - 14) - (23a^3 - 15a^2 + 25a - 27)$
23. $(-7c^3 + c^2 + 7c + 9) - (-3c^3 + 5c^2 + 11c + 7)$
24. $(8r^3 - 3r^2 + 8r - 13) - (6r^3 - 8r^2 - 15r + 4)$
25. $(3wy^2 + 7y^2) - (w^2 - 9y^2) - (-2wy^2 + 4y^2)$
26. $(4ab - 5ab^2) - (2a^2b + ab^2) - (5ab - 7a^2b)$
27. $(-11a^2 + 9a - 23) - (9a - 33) - (13a^2 + 9a - 19)$

28. $(8rp - 13r + 19p) - (-8rp + r - 32p) - (-12r + 13p)$

29. $(-7z^3 - 3z^2) - (z^3 + 7z^2 + 11z) - (7z^3 + 4z^2 + 10z)$

30. $(4x^2 - 7x) - (2x^2 - 5x + 15) - (-6x^2 + x - 15)$

31. $(f^2)(3f^3 + 5)$

32. $(g^3)(-2g + 8)$

33. $2n^2(-10n - 7)$

34. $-h^2(-7h^2 - 1)$

35. $(4j^3 - 7j^2)(-3j^3)$

36. $(3b^2 + b)(-9b^4)$

37. $-v^4(-8v^2 + 5v)$

38. $(5ab)(-3a + 12b^2)$

39. $2xy^2z(9x^2y^3 - z)$

40. $mn(-5m^2 - 3mn)$

41. $(cd^3)(3cd + 4c^4)$

42. $(x^2y - xy)(-xy^3)$

43. $-a^2b(-a^2b - ab^3)$

44. $(a^2b)(a^4 - ab^2 + 1)$

45. $-x^2y^2z(x - xy + z)$

46. $p^2r^3(2pr + 4p^2 - 3r)$

47. $4xyz(2xy - 5xz + yz)$

48. $(-5m + p^3 - 2mp)(-3mp)$

49. $-4t^3(-t^5 - 2t^4 + 5t^2 + 6t)$

50. $(3h^2)(4h^4 + 2h^3 - 6h^2 - 6h)$

51. $2d^3(5d^3 + 2d^2 + d - 8)$

52. $(-7m^4)(2m^4 - 3m^3 - m + 1)$

Divide.

53. $\frac{-ay^3 - by^2}{-y^2}$

54. $\frac{4k^4 + k^2}{k^2}$

55. $\frac{-x^5 - x^4}{x^3}$
56. $\frac{6a^2c - a^2}{-a^2}$
57. $\frac{48m^2 - 60m}{12m}$
58. $\frac{32x^2 - 40xy}{-8x}$
59. $\frac{15z^3 + 5z^2}{5z^2}$
60. $\frac{8x^6 + 12x^4}{4x^3}$
61. $\frac{5ab^2 + a^2b^2}{ab^2}$
62. $\frac{9w^2y^2 - 18w^2}{3w^2}$
63. $\frac{k^2m^2 - k^3m}{-km}$
64. $\frac{-3cd + 42cd^2}{-3cd}$
65. $\frac{24n^2p^3 - 8n^2p}{-4n^2p}$
66. $\frac{-2a^4b^2 + 5a^2b^3}{-ab^2}$
67. $\frac{26xy^3 + 65x^2y^2}{13xy^2}$
68. $\frac{2r^3w^4 - 4r^3w^3}{2r^2w^3}$
69. $\frac{35bx + 14b^2x - 42bx^2}{7bx}$
70. $\frac{6u^6 - 24u^4 - 10u^2}{-2u^2}$
71. $\frac{15b^2y^2 - 20by^2 - 5by}{5by}$
72. $\frac{8cd - 4cd^2 - 4d^2}{-4d}$
73. $\frac{a^{4x+1} + a^{3x+1} - a^{2x+3}}{a^{2x+1}}$

74.
$$\frac{m^{k+5} + m^{2k+1} + m^{k+2}}{m^{k+1}}$$

75.
$$\frac{a^{5x} + a^{3x+1} - a^{2x+3}}{a^{2x+2}}$$

76.
$$\frac{k^{3n-1} + k^{2n} + k^{n+4}}{k^{n+2}}$$

7:

Evaluate: $15x + 4$ for $x = 2$

78. $-7 - (1 - 2z)$ for $z = -8$

Evaluate for the given value(s).

79. $-[-(3x - 5) + x]$ for $x = -9$

80. $-n + 7p$ for $n = -16$, $p = 4$

81. $-5(xy - 9)$ for $x = 5$, $y = -2$

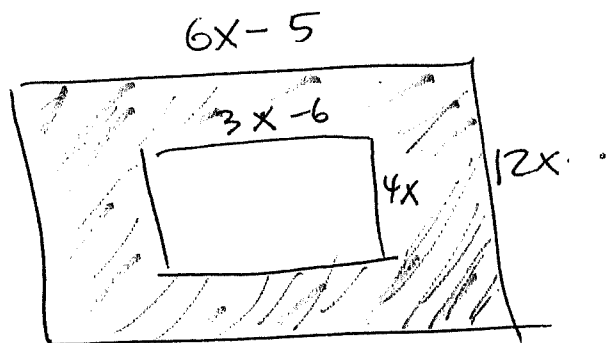
82. $r - [-s - (r + s)]$ for $r = 15$, $s = 12$

83. $-p + [n - (p - n)]$ for $n = 14$, $p = -8$

84. $(a + d - 3)(a + d)$ for $a = -7$, $d = 3$

85. $(x - y)(x - y + 5)$ for $x = -8$, $y = -1$

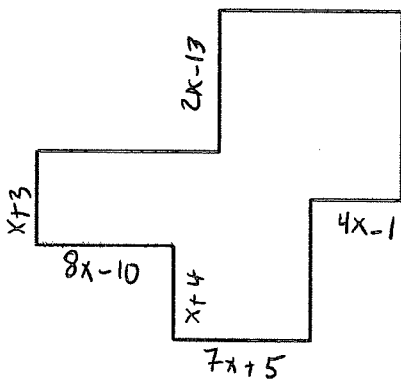
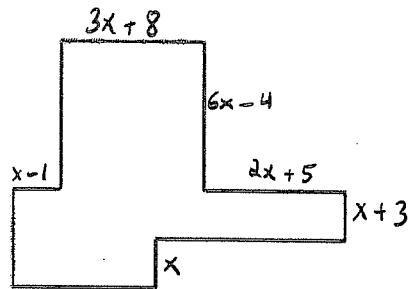
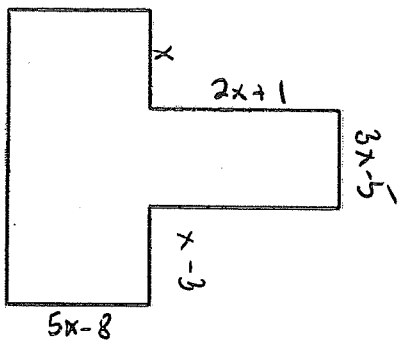
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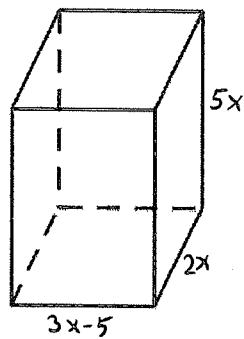
- aire hachurée = ?

- aire hachurée = ? pour $x = 3$

1. Quel est le périmètre des figures suivantes? (tous les angles intérieurs sont droits)



Quel est le volume de ce prisme rectangulaire droit ?



2. La différence de deux polynômes est $-2y^2 - 6y + 7$. Un de ces polynômes est $9y^2 - y - 11$. Quel est l'autre ? Trouve toutes les possibilités.

3/1/2015

Answer List

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|------------------------------------|---------------------------------------|--------------------------------------|
| 1. $xy - 3y + 12x$ | 2. $9p + 10np$ | 3. $5c^2 - 6c + 9cd + 3d$ |
| 4. $-3ab + b - 8a + 8$ | 5. $2w^3 - 2w^2 - 4w - 37$ | 6. $12x^3 - 45x + 32$ |
| 7. $-14a + 7b - 25c$ | 8. $3p^2 - 5p$ | 9. $12x^2 + 9x + 16y + 4xy$ |
| 10. $5cd + c + 5d$ | 11. $-a^2 - b$ | 12. $2u^2 + 11u - 16$ |
| 13. $-8x^2y - 5xy - 31y$ | 14. $6a^4 + a^3 - 8a^2 + a$ | 15. $8r^2t + 15rt^2 - 14r^2t^2$ |
| 16. $-30k^2m + 13km - 2km^2$ | 17. $-x^2 + 20y$ | 18. $-a^3 - 10a^2 + a$ |
| 19. $-8d^2 + 18$ | 20. $-17w^4 - w^3 + 10w^2$ | 21. $-8y^3 - 8y^2 + 21y - 5$ |
| 22. $5a^3 + 38a^2 - 59a + 13$ | 23. $-4c^3 - 4c^2 - 4c + 2$ | 24. $2r^3 + 5r^2 + 23r - 17$ |
| 25. $5wy^2 - w^2 + 12y^2$ | 26. $-ab - 6ab^2 + 5a^2b$ | 27. $-24a^2 - 9a + 29$ |
| 28. $16rp - 2r + 38p$ | 29. $-15z^3 - 14z^2 - 21z$ | 30. $8x^2 - 3x$ |
| 31. $3f^5 + 5f^2$ | 32. $-2g^4 + 8g^3$ | 33. $-20n^3 - 14n^2$ |
| 34. $7h^4 + h^2$ | 35. $-12j^6 + 21j^5$ | 36. $-27b^6 - 9b^5$ |
| 37. $8v^6 - 5v^5$ | 38. $-15a^2b + 60ab^3$ | 39. $18x^3y^5z - 2xy^2z^2$ |
| 40. $-5m^3n - 3m^2n^2$ | 41. $3c^2d^4 + 4c^5d^3$ | 42. $-x^3y^4 + x^2y^4$ |
| 43. $a^4b^2 + a^3b^4$ | 44. $a^6b - a^3b^3 + a^2b$ | 45. $-x^3y^2z + x^3y^3z - x^2y^2z^2$ |
| 46. $2p^3r^4 + 4p^4r^3 - 3p^2r^4$ | 47. $8x^2y^2z - 20x^2yz^2 + 4xy^2z^2$ | 48. $15m^2p - 3mp^4 + 6m^2p^2$ |
| 49. $4t^8 + 8t^7 - 20t^5 - 24t^4$ | 50. $12h^6 + 6h^5 - 18h^4 - 18n^3$ | 51. $10d^6 + 4d^5 + 2d^4 - 16d^3$ |
| 52. $-14m^8 + 21m^7 + 7m^5 - 7m^4$ | 53. $ay + b$ | 54. $4k^2 + 1$ |
| 55. $-x^2 - x$ | 56. $-6c + 1$ | 57. $4m - 5$ |
| 58. $-4x + 5y$ | 59. $3z + 1$ | 60. $2x^{\frac{3}{2}} + 3x$ |
| 61. $5 + a$ | 62. $3y^2 - 6$ | 63. $-km + k^2$ |
| 64. $1 - 14d$ | 65. $-6p^2 + 2$ | 66. $2a^3 - 5ab$ |
| 67. $2y + 5x$ | 68. $rw - 2r$ | 69. $5 + 2b - 6x$ |
| 70. $-3u^4 + 12u^2 + 5$ | 71. $3by - 4y - 1$ | 72. $-2c + cd + d$ |
| 73. $a^{2x} + a^x - a^2$ | 74. $m^4 + m^k + m$ | 75. $a^{3x-2} + a^{x-1} - a$ |
| 76. $k^{2n-3} + k^{n-2} + k^2$ | 77. 34 | 78. -24 |
| 79. -23 | 80. 44 | 81. 95 |
| 82. 54 | 83. 44 | 84. 28 |
| 85. 14 | | |

Dernière page : 1) $24x - 30$; $28x + 22$; $46x - 24$; $30x^3 - 50x^2$

86. $60x^2 - 36x$

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2) a) $11y^2 + 5y - 18$; b) $7y^2 - 7y - 4$