

$$53. x^3 + 64$$

$$54. 27a^3 + 125y^3$$

$$55. 8a^3 - 27b^3$$

$$56. 1 - 64a^3$$

$$57. 16a^4 + 54a$$

$$58. 8a^3 - b^3 - 4ax + 2bx$$

$$59. (a+b)^3 - (a-b)^3$$

$$60. (a+b)^3 - 8$$

$$61. a^3 + b^3 + a + b$$

$$62. a^3 - b^3 - a + b$$

$$63. a^3 - 2\sqrt{2}b^3$$

$$64. x^6 - y^6$$

$$65. (2x-3y)^3 - (2x-3y)^3$$

$$66. a^3 + 3a^2b + 3ab^2 + b^3 - 8$$

$$67. a^3 + 27b^3 + 8c^3 - 18abc$$

$$68. a^3 - 8b^3 + 64c^3 + 24abc$$

$$69. 2\sqrt{2}a^3 + 8b^3 - 27c^3 + 18\sqrt{2}abc$$

$$70. a^3 - b^3 + 1 + 3ab$$

$$71. 2\sqrt{2}a^3 + 16\sqrt{2}b^3 + c^3 - 12abc$$

$$72. (a-b-c)(a^2 + b^2 + c^2 + ab + bc + ca)$$

$$73. (3x-5y-4)(9x^2 + 25y^2 + 15xy + 12x - 20y + 16)$$

$$74. (p-q)^3 + (q-r)^3 + (r-p)^3$$

$$75. (3a-2b)^3 + (2b-5c)^3 + (5c-3a)^3$$

$$76. (5a-7b)^3 + (9c-5a)^3 + (7b-9c)^3$$

$$77. a^3(b-c)^3 + b^3(c-a)^3 + c^3(a-b)^3$$

$$78. 125 - 8x^3 - 27y^3 - 90xy$$

$$79. (x-2y-z)(x^2 + 4y^2 + z^2 + 2xy - 2yz + zx)$$

$$80. (x-2y+3)(x^2 + 4y^2 + 2xy - 3x + 6y + 9)$$

$$81. \text{ Prove that } \frac{0.87 \times 0.87 \times 0.87 + 0.13 \times 0.13 \times 0.13}{0.87 \times 0.87 - 0.13 \times 0.87 + 0.13 \times 0.13} = 1$$

$$82. \text{ Simplify } (x+y)^3 - (x-y)^3 - 6y(x^2 - y^2)$$

$$83. \text{ Prove that } a^3 + b^3 + c^3 - 3abc = \frac{1}{2}(a+b+c)\{(a-b)^2 + (b-c)^2 + (c-a)^2\}$$

$$84. \text{ Prove that } 2(a^3 + b^3 + c^3 - 3abc) = (a+b)^3 + (b+c)^3 + (c+a)^3 - 3(a+b)(b+c)(c+a)$$

$$85. \text{ simplify } \frac{(a^2 - b^2)^3 + (b^2 - c^2)^3 + (c^2 - a^2)^3}{(a-b)^3 + (b-c)^3 + (c-a)^3}$$

$$86. \text{ If } x = y = 333 \text{ and } z = 334, \text{ Find the value of } x^3 + y^3 + z^3 - 3xyz$$

$$87. \text{ Factorise } (x^2 + 5x + 4)(x^2 + 5x + 6) - 15$$

$$88. \text{ Factorise } x^2 - a^2 + x - 7a - 12$$

$$89. \text{ If } x + \frac{1}{x} = 3 \text{ Find the value of } x^5 + \frac{1}{x^5}.$$

$$90. \text{ If } \frac{a}{b} + \frac{c}{d} = \frac{b}{a} + \frac{d}{c}, \text{ Show that } \frac{a^3}{b^3} + \frac{c^3}{d^3} = \frac{b^3}{a^3} + \frac{d^3}{c^3}$$