



Réduire une expression sans parenthèses

Exercice : Réduire les expressions suivantes.

$$9 + 3x + 4x^2 + 6 =$$

$$7 + 5x^2 + 4x + 7 + 4x^2 + 6x =$$

$$3x + 7x^2 + 5 + 5 =$$

$$4 + 2x^2 + 6x + 2x + 8x^2 + 3 =$$

$$6 + 2x^2 + 2x + 6 + 7x =$$

$$4x + 2 + x + 3x^2 + 7 =$$

$$6x^2 + 6 + 6x + x^2 + 2 + 8x =$$

$$2x^2 + 2x^2 + 6x + 4 + 9x =$$

$$4 + 7x^2 + 3x + 6x + 3 + 3x^2 =$$

$$7x + 6x^2 + 7 + 6x + 5 + 4x^2 =$$

$$8x^2 + 8 + 8x + x + 8 =$$

$$3x + 8x + x^2 + 8 + 3x^2 + 2 =$$

$$7 + 6x^2 + 1 + 4x + 4x + 7x^2 =$$

$$3 + 6 + 7x^2 + x + 9x^2 + 4x =$$

$$4 + 5x + 7x + 4x^2 + 9x^2 + 6 =$$

$$7 + 9x^2 + 9x + 3x + 9 + 7x^2 =$$

$$5x^2 + 9x + 2x^2 + 8x + 4 =$$

$$5 + 5 + 4x + 5x + 3x^2 + 7x^2 =$$

$$x^2 + 7x + 5x^2 + 5x + 7 =$$

$$6 + 6x + 8x^2 + 4x + 3x^2 + 7 =$$

$$A = 6 + 2x + 4x^2 - 7 - 3x$$

$$B = -4 - 8x + 7x^2 - 2x + 3x^2 + 3$$

$$C = -9 - 4x^2 + 2x - 7$$

$$D = -8x + 7x^2 - 8x^2 - 4$$

$$E = 6 + 9x - 3x^2 - 7x^2 + 4x$$

$$F = 4x + 9 - 3 + 2x^2 + 4x$$

$$G = -8 + 8x^2 + 8x + 4$$

$$H = -3x - 5 - 5x^2 - 2x$$

$$I = 4x^2 + 2x + 2 + 4 + 9x^2 + 4x$$

$$J = 4 + 7x^2 - 1 + 7x$$

$$K = -3x^2 + 4 - 9x + 6x - 5$$

$$L = 4 - x + 6 + 6x^2$$

$$M = 7 - 2x^2 + x - 6x^2$$

$$N = -8 + 6x + 4x^2 - 4x - 2 - x^2$$

$$O = 7x^2 - 3x^2 + 2x - x + 7$$

$$P = 5x - 3 + 5x + 2x^2 + 8$$

$$Q = x + 2x^2 - 5 - 3x^2$$

$$R = -7 + 9x + 5x^2 - 8$$

$$S = 2 - 6x + 2x^2 - 6x$$

$$T = 2x + 5x + 1 + 3 - 2x^2 - 8x^2$$



Correction

Exercice : Réduire les expressions suivantes.

$$A = 9 + 3x + 4x^2 + 6$$

$$A = 4x^2 + 3x + 9 + 6$$

$$A = 4x^2 + 3x + 15$$

$$B = 7 + 5x^2 + 4x + 7 + 4x^2 + 6x$$

$$B = 5x^2 + 4x^2 + 4x + 6x + 7 + 7$$

$$B = 9x^2 + 10x + 14$$

$$C = 3x + 7x^2 + 5 + 5$$

$$C = 7x^2 + 3x + 5 + 5$$

$$C = 7x^2 + 3x + 10$$

$$D = 4 + 2x^2 + 6x + 2x + 8x^2 + 3$$

$$D = 2x^2 + 8x^2 + 6x + 2x + 4 + 3$$

$$D = 10x^2 + 8x + 7$$

$$E = 6 + 2x^2 + 2x + 6 + 7x$$

$$E = 2x^2 + 2x + 7x + 6 + 6$$

$$E = 2x^2 + 9x + 12$$

$$F = 4x + 2 + x + 3x^2 + 7$$

$$F = 3x^2 + 4x + x + 2 + 7$$

$$F = 3x^2 + 5x + 9$$

$$G = 6x^2 + 6 + 6x + x^2 + 2 + 8x$$

$$G = 6x^2 + x^2 + 6x + 8x + 6 + 2$$

$$G = 7x^2 + 14x + 8$$

$$H = 2x^2 + 2x^2 + 6x + 4 + 9x$$

$$H = 4x^2 + 6x + 9x + 4$$

$$H = 4x^2 + 15x + 4$$

$$I = 4 + 7x^2 + 3x + 6x + 3 + 3x^2$$

$$I = 7x^2 + 3x^2 + 3x + 6x + 4 + 3$$

$$I = 10x^2 + 9x + 7$$

$$J = 7x + 6x^2 + 7 + 6x + 5 + 4x^2$$

$$J = 6x^2 + 4x^2 + 7x + 6x + 7 + 5$$

$$J = 10x^2 + 13x + 12$$

$$K = 8x^2 + 8 + 8x + x + 8$$

$$K = 8x^2 + 8x + x + 8 + 8$$

$$K = 8x^2 + 9x + 16$$

$$L = 3x + 8x + x^2 + 8 + 3x^2 + 2$$

$$L = x^2 + 3x^2 + 3x + 8x + 8 + 2$$

$$L = 4x^2 + 11x + 10$$

$$A = 6 + 2x + 4x^2 - 7 - 3x$$

$$A = 4x^2 + 2x - 3x + 6 - 7$$

$$A = 4x^2 - x - 1$$

$$B = -4 - 8x + 7x^2 - 2x + 3x^2 + 3$$

$$B = 7x^2 + 3x^2 - 8x - 2x - 4 + 3$$

$$B = 10x^2 - 10x - 1$$

$$C = -9 - 4x^2 + 2x - 7$$

$$C = -4x^2 + 2x - 9 - 7$$

$$C = -4x^2 + 2x - 16$$

$$D = -8x + 7x^2 - 8x^2 - 4$$

$$D = 7x^2 - 8x^2 - 8x - 4$$

$$D = -x^2 - 8x - 4$$

$$E = 6 + 9x - 3x^2 - 7x^2 + 4x$$

$$E = -3x^2 - 7x^2 + 9x + 4x + 6$$

$$E = -10x^2 + 13x + 6$$

$$F = 4x + 9 - 3 + 2x^2 + 4x$$

$$F = 2x^2 + 4x + 4x + 9 - 3$$

$$F = 2x^2 + 8x + 6$$

$$G = -8 + 8x^2 + 8x + 4$$

$$G = 8x^2 + 8x - 8 + 4$$

$$G = 8x^2 + 8x - 4$$

$$H = -3x - 5 - 5x^2 - 2x$$

$$H = -5x^2 - 3x - 2x - 5$$

$$H = -5x^2 - 5x - 5$$

$$I = 4x^2 + 2x + 2 + 4 + 9x^2 + 4x$$

$$I = 4x^2 + 9x^2 + 2x + 4x + 2 + 4$$

$$I = 13x^2 + 6x + 6$$

$$J = 4 + 7x^2 - 1 + 7x$$

$$J = 7x^2 + 7x + 4 - 1$$

$$J = 7x^2 + 7x + 3$$

$$K = -3x^2 + 4 - 9x + 6x - 5$$

$$K = -3x^2 - 9x + 6x + 4 - 5$$

$$K = -3x^2 - 3x - 1$$

$$L = 4 - x + 6 + 6x^2$$

$$L = 6x^2 - x + 4 + 6$$

$$L = 6x^2 - x + 10$$

$$M = 7 + 6x^2 + 1 + 4x + 4x + 7x^2$$

$$M = 6x^2 + 7x^2 + 4x + 4x + 7 + 1$$

$$M = 13x^2 + 8x + 8$$

$$N = 3 + 6 + 7x^2 + x + 9x^2 + 4x$$

$$N = 7x^2 + 9x^2 + x + 4x + 3 + 6$$

$$N = 16x^2 + 5x + 9$$

$$O = 4 + 5x + 7x + 4x^2 + 9x^2 + 6$$

$$O = 4x^2 + 9x^2 + 5x + 7x + 4 + 6$$

$$O = 13x^2 + 12x + 10$$

$$P = 7 + 9x^2 + 9x + 3x + 9 + 7x^2$$

$$P = 9x^2 + 7x^2 + 9x + 3x + 7 + 9$$

$$P = 16x^2 + 12x + 16$$

$$Q = 5x^2 + 9x + 2x^2 + 8x + 4$$

$$Q = 7x^2 + 17x + 4$$

$$R = 5 + 5 + 4x + 5x + 3x^2 + 7x^2$$

$$R = 3x^2 + 7x^2 + 4x + 5x + 5 + 5$$

$$R = 10x^2 + 9x + 10$$

$$S = x^2 + 7x + 5x^2 + 5x + 7$$

$$S = x^2 + 5x^2 + 7x + 5x + 7$$

$$S = 6x^2 + 12x + 7$$

$$T = 6 + 6x + 8x^2 + 4x + 3x^2 + 7$$

$$T = 8x^2 + 3x^2 + 6x + 4x + 6 + 7$$

$$T = 11x^2 + 10x + 13$$

$$M = 7 - 2x^2 + x - 6x^2$$

$$M = -2x^2 - 6x^2 + x + 7$$

$$M = -8x^2 + x + 7$$

$$N = -8 + 6x + 4x^2 - 4x - 2 - x^2$$

$$N = 4x^2 - x^2 + 6x - 4x - 8 - 2$$

$$N = 3x^2 + 2x - 10$$

$$O = 7x^2 - 3x^2 + 2x - x + 7$$

$$O = 4x^2 + x + 7$$

$$P = 5x - 3 + 5x + 2x^2 + 8$$

$$P = 2x^2 + 5x + 5x - 3 + 8$$

$$P = 2x^2 + 10x + 5$$

$$Q = x + 2x^2 - 5 - 3x^2$$

$$Q = 2x^2 - 3x^2 + x - 5$$

$$Q = -x^2 + x - 5$$

$$R = -7 + 9x + 5x^2 - 8$$

$$R = 5x^2 + 9x - 7 - 8$$

$$R = 5x^2 + 9x - 15$$

$$S = 2 - 6x + 2x^2 - 6x$$

$$S = 2x^2 - 6x - 6x + 2$$

$$S = 2x^2 - 12x + 2$$

$$T = 2x + 5x + 1 + 3 - 2x^2 - 8x^2$$

$$T = -2x^2 - 8x^2 + 2x + 5x + 1 + 3$$

$$T = -10x^2 + 7x + 4$$