

Include brackets

$$2(x + 4) = 6$$

$$3(2x - 4) = 10$$

$$\frac{1}{2}(x - 4) = 2$$

$$\frac{x - 4}{2} = x - 3$$

$$4[x - 2(x+1)] = 2.1$$

$$8[2 - 3(4-x)] = 1$$

$$2[1 - 2(3 - 2[x-1])] = 4$$

$$3[8 - 3(x-1) + 2] = 5$$

$$x - (4 - x) = 3$$

$$2[4 - (x + 2) + 3] = x$$

$$8[2 - 3(1 - x) + 4(x + 2)] = x + 2$$

$$4[(x + 2) + 4(x - 1)] = 3$$

$$\frac{x-2}{x+2} = 3$$

$$\frac{x-2}{4} = x-2$$

$$\frac{x+2(x-1)}{x+1} = 2$$

$$\frac{x-1}{x+1} = 3$$

$$a(x+1) + ax = 2$$

$$ax + bx = 4$$

$$ax + \frac{a}{2}x = 7$$

$$\frac{ax-1}{x} = 2+c$$

$$a(x - 2[x + b]) = 8$$

$$\frac{a(x-1)}{x+2} = \beta + 4$$

$$(x+1)(a+b) = 2$$

$$4(x+1) + 2 = \frac{ax-1}{b+2}$$

$$\frac{7(x - [x-2] + a)}{x+2} = \beta$$

$$\frac{6(2 - a[x+1])}{\alpha+1} = x$$

$$\frac{\alpha [2x - x(\alpha + 2)]}{\alpha + \beta} + \frac{x}{\alpha - \beta} = \frac{1}{2}$$



$$\frac{\Gamma \sin \theta + x}{\alpha + 1} = \frac{x - \sin \phi}{\alpha - 1} + x_0^2$$

$$y - y_0 = \frac{x - x_0}{x - x_1} + b$$

$$2x = \alpha(x-1)\sin\theta + \frac{x+\beta}{\cos\phi} + 1$$

# Include brackets

$$2(x + 4) = 6$$

$$2x + 8^{-8} = 6^{-8}$$

$$2x = -2$$

$$x = -1$$

$$3(2x - 4) = 10$$

$$6x - 12^{+12} = 10^{+12}$$

$$6x = 22$$

$$x = \frac{11}{3} = 3.67$$

$$\frac{1}{2}(x - 4) = 2$$

$$\frac{1}{2}x - 2^{+2} = 2^{+2}$$

$$\frac{1}{2}x = 4$$

$$x = 8$$

$$2\left(\frac{x - 4}{2}\right) = (x - 3)2$$

$$x^{-2x} - 4^{+4} = 2x^{-2x} - 6^{+4}$$

$$-x = -2$$

$$x = 2$$

$$4[x - 2(x+1)] = 2.1$$

$$4[x - 2x - 2] = 2.1$$

$$4[-x - 2] = 2.1$$

$$-4x - 8 = 2.1$$

$$-4x = 10.1$$

$$x = -2.525$$

$$8[2 - 3(4-x)] = 1$$

$$8[2 - 12 + 3x] = 1$$

$$8[-10 + 3x] = 1$$

$$-80 + 24x = 1$$

$$24x = 81$$

$$x = 3.375$$

$$2[1 - 2(3 - 2[x - 1])] = 4$$

$$2[1 - 2(3 - 2x + 2)] = 4$$

$$2[1 - 2(5 - 2x)] = 4$$

$$2[1 - 10 + 4x] = 4$$

$$2[-9 + 4x] = 4$$

$$4x = 11$$

$$x = 2.75$$

$$3[8 - 3(x-1) + 2] = 5$$

$$3[10 - 3x + 3] = 5$$

$$3[13 - 3x] = 5$$

$$39 - 9x = 5$$

$$-9x = -34$$

$$x = \frac{34}{9} \approx 3.78$$



$$x - (4 - x) = 3$$

$$x - 4 + x = 3$$

$$2x = 7$$

$$x = \frac{7}{2} = 3.5$$

$$2[4 - (x + 2) + 3] = x$$

$$2[7 - x - 2] = x$$

$$2[5 - x] = x$$

$$10 - 2x = x$$

$$3x = 10$$

$$x = \frac{10}{3} \approx 3.33$$

$$8[2 - 3(1 - x) + 4(x + 2)] = x + 2$$

$$8[2 - 3 + 3x + 4x + 8] = x + 2$$

$$8[7 + 7x] = x + 2$$

$$56 + 56x = x + 2$$

$$55x = -54$$

$$x = -\frac{54}{55} \approx -0.98$$

$$4[(x + 2) + 4(x - 1)] = 3$$

$$4[x + 2 + 4x - 4] = 3$$

$$4[5x - 2] = 3$$

$$20x - 8 = 3$$

$$20x = 11$$

$$x = \frac{11}{20} = 0.55$$

$$(x+2)\left(\frac{x-2}{x+2}\right) = (3)(x+2)$$

$$x-2 = 3x+6$$

$$2x = -8$$

$$\boxed{x = -4}$$

$$(4)\left(\frac{x-2}{4}\right) = (x-2)(4)$$

$$x-2 = 4x-8$$

$$-3x = -6$$

$$\boxed{x = 2}$$

$$(x+1)\left(\frac{x+2(x-1)}{x+1}\right) = (2)(x+1)$$

$$x + 2x - 2 = 2x + 2$$

$$\boxed{x = 4}$$

$$(x+1)\left(\frac{x-1}{x+1}\right) = (\beta)(x+1)$$

$$x-1 = \beta x + \beta$$

$$(x - \beta x) = 1 + \beta$$

$$x(1-\beta) = 1+\beta$$

$$\boxed{x = \frac{1+\beta}{1-\beta}}$$

$$a(x+1) + ax = 2$$

$$ax + a + ax = 2$$

$$2ax = 2 - a$$

$$x = \frac{2-a}{2a}$$

$$(ax + bx) = 4$$

$$x(a+b) = 4$$

$$x = \frac{4}{a+b}$$

$$ax + \frac{a}{2}x = 7$$

$$\frac{2}{3a} \left( \frac{3}{2}ax \right) = (7) \frac{2}{3a}$$

$$x = \frac{14}{3a}$$

$$x \left( \frac{ax-1}{x} \right) = (2+c)x$$

$$ax - 1 = 2x + cx$$

$$ax - 2x - cx = 1$$

$$x(a-2-c) = 1$$

$$x = \frac{1}{a-2-c}$$



$$a(x - 2[x + b]) = 8$$

$$a(x - 2x - 2b) = 8$$

$$ax - 2ax - 2ab = 8$$

$$-ax = 8 + 2ab$$

$$x = -\frac{8 + 2ab}{a}$$

$$(x+2) \left( \frac{a(x-1)}{x+2} \right) = (\beta + 4)(x+2)$$

$$ax - a = (\beta + 4)(x+2)$$

$$ax - a = (\beta + 4)x + (\beta + 4)2$$

$$ax - a = \beta x + 4x + 2(\beta + 4)$$

$$ax - \beta x - 4x = a + 2(\beta + 4)$$

$$x(a - \beta - 4) = a + 2(\beta + 4)$$

$$x = \frac{a + 2(\beta + 4)}{a - \beta - 4}$$

$$(x+1)(a+b) = 2$$

$$a(x+1) + b(x+1) = 2$$

$$ax + a + bx + b = 2$$

$$ax + bx = 2 - a - b$$

$$x(a+b) = 2 - a - b$$

$$x = \frac{2 - a - b}{a + b}$$

$$4(x+1) + 2 = \frac{ax-1}{b+2}$$

$$4x+4+2 = \frac{ax-1}{b+2}$$

$$(b+2)(4x+6) = ax-1$$

$$4bx + 6b + 8x + 12 = ax - 1$$

$$4bx + 8x - ax = -1 - 6b - 12$$

$$x = \frac{-13 - 6b}{4b + 8 - a}$$

$$(x+2) \left( \frac{7(x - [x-2] + a)}{x+2} \right) = (\beta)(x+2)$$

$$\cancel{7x} - \cancel{7x} + 14 + 7a = \beta x + 2\beta$$

$$\beta x = 7a - 2\beta + 14$$

$$x = \frac{7a - 2\beta + 14}{\beta}$$

$$(\alpha+1) \left( \frac{6(2 - a[x+1])}{\alpha+1} \right) = (x)(\alpha+1)$$

$$6(2 - ax - a) = x\alpha + x$$

$$12 - 6ax - 6a = x\alpha + x$$

$$x\alpha + x + 6ax = 12 - 6a$$

$$x = \frac{12 - 6a}{\alpha + 1 + 6a}$$

$$\frac{(\alpha+\beta)(\alpha-\beta) \left( \frac{\alpha [2x - x(\alpha+\beta)]}{\alpha+\beta} + \frac{x}{\alpha-\beta} \right)}{(\alpha-\beta)} = \left( \frac{1}{2} \right) (\alpha+\beta)(\alpha-\beta)$$

$$(\alpha-\beta) \alpha [2x - \alpha x - \beta x] + x(\alpha+\beta) = \left( \frac{\alpha}{2} + \frac{\beta}{2} \right) (\alpha-\beta)$$

$$-\alpha^2 x (\alpha-\beta) + \alpha x + \beta x = \left( \frac{\alpha}{2} + \frac{\beta}{2} \right) \alpha - \left( \frac{\alpha}{2} + \frac{\beta}{2} \right) \beta$$

$$-\alpha^3 x + \alpha^2 \beta x + \alpha x + \beta x = \frac{\alpha^2}{2} + \frac{\alpha \beta}{2} - \frac{\alpha \beta}{2} - \frac{\beta^2}{2}$$

$$x(\alpha + \beta + \alpha^2 \beta - \alpha^3) = \frac{1}{2}(\alpha^2 - \beta^2)$$

$$x = \frac{\alpha^2 - \beta^2}{2(\alpha + \alpha^2 \beta - \alpha^3 + \beta)}$$



$$\frac{(\alpha-1)}{(\alpha+1)} \left( \frac{\Gamma \sin \theta + x}{\alpha + 1} \right) = \left( \frac{x - \sin \phi}{\alpha - 1} + x_0^2 \right) (\alpha-1)(\alpha+1)$$

$$(\Gamma \sin \theta + x)(\alpha-1) = (x - \sin \phi)(\alpha+1) + x_0^2(\alpha-1)(\alpha+1)$$

$$\alpha(\Gamma \sin \theta + x) - (\Gamma \sin \theta + x) = \alpha(x - \sin \phi) + (x - \sin \phi) + (x_0^2 \alpha - x_0^2)(\alpha+1)$$

$$\Gamma \alpha \sin \theta + \cancel{\alpha x} - \Gamma \sin \theta - x = \cancel{\alpha x} - \alpha \sin \phi + x - \sin \phi + x_0^2 \alpha^2 + \cancel{x_0^2 \alpha} - \cancel{x_0^2 \alpha} - x_0^2$$

$$-2x = \Gamma \sin \theta - \Gamma \alpha \sin \theta - \alpha \sin \phi - \sin \phi + x_0^2 \alpha^2 - x_0^2$$

$$x = \frac{1}{2} \Gamma \alpha \sin \theta + \frac{\alpha}{2} \sin \phi + \frac{1}{2} \sin \phi + \frac{x_0^2}{2} - \frac{x_0^2 \alpha^2}{2} - \frac{\Gamma}{2} \sin \theta$$

$$x = \frac{\Gamma}{2} \sin \theta (\alpha - 1) + \frac{1}{2} \sin \phi (\alpha + 1) + \frac{x_0^2}{2} (1 - \alpha^2)$$

$$\underbrace{(x-x_1)} \underbrace{(y-y_0)} = \left( \frac{x-x_0}{x-x_1} + b \right) \underbrace{(x-x_1)}$$

$$y(x-x_1) - y_0(x-x_1) = x-x_0 + b(x-x_1)$$

$$yx - yx_1 - y_0x + y_0x_1 = x - x_0 + bx - bx_1$$

$$yx - y_0x - x - bx = yx_1 - y_0x_1 - x_0 - bx_1$$

$$x = \frac{yx_1 - y_0x_1 - x_0 - bx_1}{y - y_0 - 1 - b}$$

$$\cos \phi (2x) = \left( \alpha (x-1) \sin \theta + \frac{x+\beta}{\cos \phi} + 1 \right) \cos \phi$$

$$2x \cos \phi = \alpha x \sin \theta \cos \phi - \alpha \sin \theta \cos \phi + x + \beta + \cos \phi$$

$$2x \cos \phi - \alpha x \sin \theta \cos \phi - x = \beta - \alpha \sin \theta \cos \phi + \cos \phi$$

$$x (2 \cos \phi - \alpha \sin \theta \cos \phi - 1) = \beta - \alpha \sin \theta \cos \phi + \cos \phi$$

$$x = \frac{\beta - \alpha \sin \theta \cos \phi + \cos \phi}{2 \cos \phi - \alpha \sin \theta \cos \phi - 1}$$