1. p016e01 - Resuelve las ecuaciones:

(a) $x^2+6=0$

Sol: $\emptyset$

(b) $x^2-9=0$

Sol: $\{-3,3\}$

(c) $x^2+3x=0$

Sol: $\{-3,0\}$

(d) $3x^2-11x=0$

Sol: $\left\{0,\frac{11}{3}\right\}$

(e) $4x^2-32x=0$

Sol: $\{0,8\}$

(f) $5x^2=0$

Sol: $\{0\}$

(g) $12x^2-18=0$

Sol: $\left\{-\frac{\sqrt{6}}{2},\frac{\sqrt{6}}{2}\right\}$

(h) $3\left(-x+1\right)\left(x+1\right)=3$

Sol: $\{0\}$

(i) $3\left(x^2-2\right)=21$

Sol: $\{-3,3\}$

(j) $x^2+6=0$

Sol: $\emptyset$

(k) $x^2-9=0$

Sol: $\{-3,3\}$

(l) $x^2+3x=0$

Sol: $\{-3,0\}$

(m) $3x^2-11x=0$

Sol: $\left\{0,\frac{11}{3}\right\}$

(n) $4x^2-32x=0$

Sol: $\{0,8\}$

(ñ) $5x^2=0$

Sol: $\{0\}$

(o) $12x^2-18=0$

Sol: $\left\{-\frac{\sqrt{6}}{2},\frac{\sqrt{6}}{2}\right\}$

(p) $3\left(-x+1\right)\left(x+1\right)=3$

Sol: $\{0\}$

(q) $3\left(x^2-2\right)=21$

Sol: $\{-3,3\}$

2. p016e02 - Resuelve las ecuaciones:

(a) $\left(2x^2+11x\right)-6=0$

Sol: $\left\{-6,\frac{1}{2}\right\}$

(b) $\left(x^2 - 10x\right) + 25 = 0$

Sol: $\{5\}$

(c) $x^2 = 0$

Sol: $\{0\}$

(d) $\left(x^2 - 2x\right) - 1 = 0$

Sol: $\left\{1 + \sqrt{2}, -\sqrt{2} + 1\right\}$

(e) $\left(3x^2 + 5x\right) - 2 = 0$

Sol: $\left\{-2, \frac{1}{3}\right\}$

(f) $\left(4x^2 - 4x\right) + 1 = 0$

Sol: $\left\{\frac{1}{2}\right\}$

(g) $\left(2x^2 - 9x\right) + 11 = 0$

Sol: $\emptyset$

(h) $\left(2x^2 + 11x\right) - 6 = 0$

Sol: $\left\{-6, \frac{1}{2}\right\}$

(i) $\left(x^2 - 10x\right) + 25 = 0$

Sol: $\{5\}$

(j) $\left(x^2 + x\right) + 1 = 0$

Sol: $\emptyset$

(k) $\left(x^2 - 2x\right) - 1 = 0$

Sol: $\left\{1 + \sqrt{2}, -\sqrt{2} + 1\right\}$

(l) $\left(3x^2 + 5x\right) - 2 = 0$

Sol: $\left\{-2, \frac{1}{3}\right\}$

(m) $\left(4x^2 - 4x\right) + 1 = 0$

Sol: $\left\{\frac{1}{2}\right\}$

(n) $\left(2x^2 - 9x\right) + 11 = 0$

Sol: $\emptyset$

(ñ) $\left(2x^2 + 11x\right) - 6 = 0$

Sol: $\left\{-6, \frac{1}{2}\right\}$

(o) $\left(x^2 - 10x\right) + 25 = 0$

Sol: $\{5\}$

(p) $\left(x^2 + x\right) + 1 = 0$

Sol: $\emptyset$

(q) $\left(x^2 - 2x\right) - 1 = 0$

Sol: $\left\{1 + \sqrt{2}, -\sqrt{2} + 1\right\}$

(r) $\left(3x^2 + 5x\right) - 2 = 0$

Sol: $\left\{-2, \frac{1}{3}\right\}$

(s) $\left(4x^2 - 4x\right) + 1 = 0$

Sol: $\left\{\frac{1}{2}\right\}$

(t) $\left(2x^2 - 9x\right) + 11 = 0$

Sol: $\emptyset$

3. p016e03 - Resuelve las ecuaciones:

(a) $-x(x-2)+9=4x+6$

Sol: $\{x \mid x \in \mathbb{R} \wedge -4x-x(x-2)+3=0\}$

(b) $\left(x^2-10x\right)+25=0$

Sol: $\{5\}$

(c) $\left(x^2+x\right)+1=0$

Sol: $\emptyset$

(d) $\left(x^2-2x\right)-1=0$

Sol: $\left\{1+\sqrt{2},-\sqrt{2}+1\right\}$

(e) $\left(3x^2+5x\right)-2=0$

Sol: $\left\{-2,\frac{1}{3}\right\}$

(f) $\left(4x^2-4x\right)+1=0$

Sol: $\left\{\frac{1}{2}\right\}$

(g) $\left(2x^2-9x\right)+11=0$

Sol: $\emptyset$

(h) $-x(x-2)+9=4x+6$

Sol: $\{x \mid x \in \mathbb{R} \wedge -4x-x(x-2)+3=0\}$

(i) $\left(x^2-10x\right)+25=0$

Sol: $\{5\}$

(j) $\left(x^2+x\right)+1=0$

Sol: $\emptyset$

(k) $\left(x^2-2x\right)-1=0$

Sol: $\left\{1+\sqrt{2},-\sqrt{2}+1\right\}$

(l) $\left(3x^2+5x\right)-2=0$

Sol: $\left\{-2,\frac{1}{3}\right\}$

(m) $\left(4x^2-4x\right)+1=0$

Sol: $\left\{\frac{1}{2}\right\}$

(n) $\left(2x^2-9x\right)+11=0$

Sol: $\emptyset$

(ñ) $-x(x-2)+9=4x+6$

Sol: $\{x \mid x \in \mathbb{R} \wedge -4x-x(x-2)+3=0\}$

(o) $-(x-1)(x+4)+2\left(x^2-3\right)=x-2$

Sol: $\{0,4\}$

(p) $\left(x^2+x\right)+1=0$

Sol: $\emptyset$

(q) $\left(x^2-2x\right)-1=0$

Sol: $\left\{1+\sqrt{2},-\sqrt{2}+1\right\}$

(r) $\left(3x^2+5x\right)-2=0$

Sol: $\left\{-2,\frac{1}{3}\right\}$

(s) $\left(4x^2-4x\right)+1=0$

Sol: $\left\{\frac{1}{2}\right\}$

(t) $\left(2x^2-9x\right)+11=0$

Sol: $\emptyset$

(u) $-x(x-2)+9=4x+6$

Sol: $\{x \mid x \in \mathbb{R} \wedge -4x-x(x-2)+3=0\}$

(v) $-(x-1)(x+4)+2\left(x^2-3\right)=x-2$

Sol: $\{0, 4\}$

(w) $\left(x^2 + x\right) + 1 = 0$

Sol: $\emptyset$

(x) $\left(x^2 - 2x\right) - 1 = 0$

Sol: $\left\{1 + \sqrt{2}, -\sqrt{2} + 1\right\}$

(y) $\left(3x^2 + 5x\right) - 2 = 0$

Sol: $\left\{-2, \frac{1}{3}\right\}$

(z) $\left(4x^2 - 4x\right) + 1 = 0$

Sol: $\left\{\frac{1}{2}\right\}$

() $\left(2x^2 - 9x\right) + 11 = 0$

Sol: $\emptyset$

() $-x(x - 2) + 9 = 4x + 6$

Sol: $\{x \mid x \in \mathbb{R} \wedge -4x - x(x - 2) + 3 = 0\}$

() $-(x - 1)(x + 4) + 2\left(x^2 - 3\right) = x - 2$

Sol: $\{0, 4\}$

() $\left(x^2 + x\right) + 1 = 0$

Sol: $\emptyset$

() $\left(x^2 - 2x\right) - 1 = 0$

Sol: $\left\{1 + \sqrt{2}, -\sqrt{2} + 1\right\}$

() $\left(3x^2 + 5x\right) - 2 = 0$

Sol: $\left\{-2, \frac{1}{3}\right\}$

() $\left(4x^2 - 4x\right) + 1 = 0$

Sol: $\left\{\frac{1}{2}\right\}$

() $\left(2x^2 - 9x\right) + 11 = 0$

Sol: $\emptyset$

() $-x(x - 2) + 9 = 4x + 6$

Sol: $\{x \mid x \in \mathbb{R} \wedge -4x - x(x - 2) + 3 = 0\}$

() $-(x - 1)(x + 4) + 2\left(x^2 - 3\right) = x - 2$

Sol: $\{0, 4\}$

() $\left(x^2 + x\right) + 1 = 0$

Sol: $\emptyset$

() $\left(x^2 - 2x\right) - 1 = 0$

Sol: $\left\{1 + \sqrt{2}, -\sqrt{2} + 1\right\}$

() $\left(3x^2 + 5x\right) - 2 = 0$

Sol: $\left\{-2, \frac{1}{3}\right\}$

() $\left(4x^2 - 4x\right) + 1 = 0$

Sol: $\left\{\frac{1}{2}\right\}$

() $\left(2x^2 - 9x\right) + 11 = 0$

Sol: $\emptyset$