

$$\frac{\{8e\}}{\{10x - 10i\}} = -3j$$

Let's solve for i.

$$\frac{(8)(2.718282)}{10x - 10i} = -3j$$

Step 1: Multiply both sides by -10i+10x.

$$21.746255 = 30ij - 30jx$$

Step 2: Flip the equation.

$$30ij - 30jx = 21.746255$$

Step 3: Add 30jx to both sides.

$$30ij - 30jx + 30jx = 21.746255 + 30jx$$

$$30ij = 30jx + 21.746255$$

Step 4: Divide both sides by 30j.

$$\frac{30ij}{30j} = \frac{30jx + 21.746255}{30j}$$

$$i = \frac{30jx + 21.746255}{30j}$$

Answer:

$$i = \frac{30jx + 21.746255}{30j}$$

Let's solve for j.

$$\frac{(8)(2.718282)}{10x - 10i} = -3j$$

Step 1: Multiply both sides by -10i+10x.

$$21.746255 = 30ij - 30jx$$

Step 2: Flip the equation.

$$30ij - 30jx = 21.746255$$

Step 3: Factor out variable j.

$$j(30i - 30x) = 21.746255$$

Step 4: Divide both sides by 30i-30x.

$$\frac{j(30i - 30x)}{30i - 30x} = \frac{21.746255}{30i - 30x}$$

$$j = \frac{21.746255}{30i - 30x}$$

Answer:

$$j = \frac{21.746255}{30i - 30x}$$

Let's solve for x.

$$\frac{(8)(2.718282)}{10x - 10i} = -3j$$

Step 1: Multiply both sides by $-10i + 10x$.

$$21.746255 = 30ij - 30jx$$

Step 2: Flip the equation.

$$30ij - 30jx = 21.746255$$

Step 3: Add $-30ij$ to both sides.

$$30ij - 30jx + \textcolor{blue}{-30ij} = 21.746255 + \textcolor{blue}{-30ij}$$

$$-30jx = -30ij + 21.746255$$

Step 4: Divide both sides by $-30j$.

$$\begin{aligned} \frac{-30jx}{\textcolor{blue}{-30j}} &= \frac{-30ij + 21.746255}{\textcolor{blue}{-30j}} \\ x &= \frac{30ij - 21.746255}{30j} \end{aligned}$$

Answer:

$$x = \frac{30ij - 21.746255}{30j}$$