OUTPUT SLIDES

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SOLUTION FOR QUADRATIC EQUATION WITH REAL AND DISTINCT ROOTS

```
Enter the degree of the equation (2 for quadratic, 3 for cubic): 2
Enter the coefficients of the polynomial (highest to lowest degree):
Coefficient of x^2: 1
Coefficient of x^1: -5
Coefficient of x^0: 6
Roots are real and distinct:
Root 1=3.00
Root 2=2.00
```

SOLUTION FOR QUADRATIC EQUATION WITH REAL AND EQUAL ROOTS

```
Enter the degree of the equation (2 for quadratic, 3 for cubic): 2
Enter the coefficients of the polynomial (highest to lowest degree):
Coefficient of x^2: 1
Coefficient of x^1: -4
Coefficient of x^0: 4
Roots are real and equal:
Root 1= Root 2= 2.00
```

SOLUTION FOR QUADRATIC EQUATION WITH NO REAL ROOTS

```
Enter the degree of the equation (2 for quadratic, 3 for cubic): 2
Enter the coefficients of the polynomial (highest to lowest degree):
Coefficient of x^2: 1
Coefficient of x^1: 4
Coefficient of x^0: 5
Roots are complex and conjugate:
Root 1= -2.00+1.00i
Root 2=-2.00-1.00i
```

SOLUTION FOR CUBIC EQUATION WITH REAL AND DISTINCT ROOTS

```
Enter the degree of the equation (2 for quadratic, 3 for cubic): 3
Enter the coefficients of the polynomial (highest to lowest degree):
Coefficient of x^3: 1
Coefficient of x^2: -6
Coefficient of x^1: 11
Coefficient of x^0: -6
Depressed cubic: t^3+(-1.00)t+(0.00)= 0
Root 1(real): 3.00
Root 2(real): 1.00
Root 3(real): 2.00
```

SOLUTION FOR CUBIC EQUATION WITH REAL AND EQUAL ROOTS

```
Enter the degree of the equation (2 for quadratic, 3 for cubic): 3
Enter the coefficients of the polynomial (highest to lowest degree):
Coefficient of x^3: 1
Coefficient of x^2: -6
Coefficient of x^1: 12
Coefficient of x^0: -8
Depressed cubic: t^3+(0.00)t+(0.00)= 0
Root 1(real, double): 2.00
Root 2(real): 2.00
```

SOLUTION FOR CUBIC EQUATION WITH NO REAL ROOTS

```
Enter the degree of the equation (2 for quadratic, 3 for cubic): 3
Enter the coefficients of the polynomial (highest to lowest degree):
Coefficient of x^3: 1
Coefficient of x^2: -6
Coefficient of x^1: 13
Coefficient of x^0: -10
Depressed cubic: t^3+(1.00)t+(0.00)= 0
Root 1(real):2.00
Root 2(complex):2.00+1.00i
Root 3(complex):2.00-1.00i
```