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**Elliptic Curve Digital Signature Algorithm**

Curve: B-233

Hash Algorithm: SHA-224

Message to be signed: "Example of ECDSA with B-233"

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**Signature Generation**

H:

6A8389D3644C7FA90D7F57E6049D0DD41B8E473CD296C71D0FF232B3

E:

6A8389D3644C7FA90D7F57E6049D0DD41B8E473CD296C71D0FF232B3

K:

8A65482917BA18F1E8B266A3795B0A3A09C439FA6B611E37123BAF72

K<sub>inv</sub>:

97589E4B9B7C0F0C1E58D2AC61E8297D83FE7D00172E64B7D0DF207DD9

R<sub>x</sub>:

186806715D9620F0A3E62C1BA593D9817B6DCB23DE85BF504C326629E63

R<sub>y</sub>:

17A9A5F0476B3CBC612CE37AE5722C0E56D392B4A5D1D91407C8AB4855B

R:

86806715D9620F0A3E62C1BA593D842E41F582B37F39F1E79D2292BD8C

D:

8AF6D5A8E875977C7D4BA1F611CF7B6D70B26140BF84A1CC281F1B7B

S:

40159539861BE6673C0A3B2E49F5F6C9532B60130C6FC78826C9E900EF

**Signature**

R:

86806715D9620F0A3E62C1BA593D842E41F582B37F39F1E79D2292BD8C

S:

40159539861BE6673C0A3B2E49F5F6C9532B60130C6FC78826C9E900EF

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**Signature Verification**

**Q\_x:**

<1D3AD52D68F8383F582E2BA00F89CE1632211EDC24440C31798E0C8ED40>

**Q\_y:**

<6C3B96CC0E6BC59355A1294E22DBF1D4B9071C28DA1389B6DEBE0E7F43>

**H:**

<6A8389D3644C7FA90D7F57E6049D0DD41B8E473CD296C71D0FF232B3>

**E:**

<6A8389D3644C7FA90D7F57E6049D0DD41B8E473CD296C71D0FF232B3>

**Sinv:**

<F9DD4B9DE5243121138011E4E537CD2D0B831DCC81C01E15CC519763F>

**U:**

<9621ACB96BA987E2354A4CA3273C142BC963CCE4CB84E17F4A6A8A3E1>

**V:**

<6F64D0192B2965749D0AC29C7840245CC70BDB296F7E71CFC59C069515>

**Rprime.X:**

<186806715D9620F0A3E62C1BA593D9817B6DCB23DE85BF504C326629E63>

**Rprime.Y:**

<17A9A5F0476B3CBC612CE37AE5722C0E56D392B4A5D1D91407C8AB4855B>

**Rprime:**

<86806715D9620F0A3E62C1BA593D842E41F582B37F39F1E79D2292BD8C>

**Verification Passed!**