

RSA project small test case

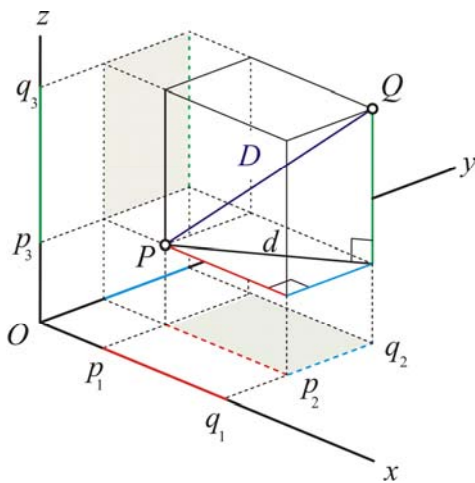
Take $N = 8643765748693289188713082687408851818999$

$$e = 155523435191$$

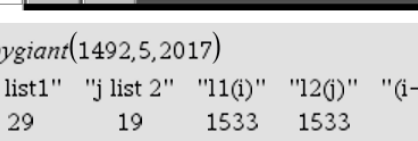
Note that $N = p \cdot q$ with $p = 87648723453278182189$ and $q = 98618273126372618291$

Encrypt **this** page with the N and e . And decipher the encrypted file to get **exactly** the same page back ... that opens normally as a pdf file.

The page you should get back should include these pictures and math text:



$$\vec{u} \times \vec{v} = \begin{bmatrix} u_1 \\ u_2 \\ u_3 \end{bmatrix} \times \begin{bmatrix} v_1 \\ v_2 \\ v_3 \end{bmatrix} := \begin{bmatrix} u_2 v_3 - u_3 v_2 \\ u_3 v_1 - u_1 v_3 \\ u_1 v_2 - u_2 v_1 \end{bmatrix}$$



The screenshot shows the MATLAB Command Window with the following content:

```

1.1 1.2 1.3 ▶ *MAT 361 New ▾ RAD
babygiant(1492,5,2017)
[ "i list1" "j list 2" "l1(i)" "l2(j)" "(i-1)."
  29         19       1533    1533         ξ
babygiant(1492,5,2017)                                838
index(1492,5,2017)                                     838
modexp(5,838,2017)                                     1492

```