

```
>> [Vmn,b]=newVandermonde(50,12);
>> [xa,xb,xc,xd,xe,xf,xg]=leastSquaresSolver(Vmn,b);
```

	Normal	CLGS	MGS	HOUSE
e+00	9.999999547136463e-01	1.000068086436312e+00	1.000000034125980e+00	-1.658616845653033 ✓
e+02	3.291430172705148e-06	-4.290467603688342e-03	-2.720648327070308e-06	1.448288578930056 ✓
e+03	-8.000076922781561e+00	-7.916496523911064e+00	-7.999927656606303e+00	-3.569538797282326 ✓
e+04	8.431667280873138e-04	-7.469767592283461e-01	-9.249649283447070e-04	4.335748571650124 ✓
e+05	1.066154600524035e+01	1.431038144788909e+01	1.067333474498446e+01	-2.987002222492488 ✓
e+06	1.890741340502600e-02	-1.056227888748981e+01	-2.938676692428999e-02	1.273201986579548 ✓
e+06	-5.734280214486475e+00	1.325039955214015e+01	-5.606893325981218e+00	-3.515110440586501 ✓
e+06	7.685122822989254e-02	-2.114840745498077e+01	-1.436553265666589e-01	6.389498538783313 ✓
e+06	1.520678610400892e+00	1.593295679436415e+01	1.769643936655484e+00	-7.579580771801112 ✓
e+06	1.292944626022887e-01	-5.412968911310600e+00	-4.721411736682057e-02	5.637126993357916 ✓
e+06	-4.242717188266449e-01	6.202572854763275e-01	-3.529529641964473e-01	-2.382445644634750 ✓
e+05	9.686110589468328e-02	2.370178745235307e-02	8.433550569316139e-02	4.360765141166836 ✓

  

	Matlab QR	Matlab backslash	SVD
	1.000000018290836e+00	1.000000018290846e+00	1.000000018290836e+00
	-1.534554536775090e-06	-1.534555592811823e-06	-1.534554618432592e-06
	-7.999956768858851e+00	-7.999956768834927e+00	-7.999956768857747e+00
	-5.837197350047063e-04	-5.837199930893298e-04	-5.837197422955682e-04
	1.067108043270127e+01	1.067108043432928e+01	1.067108043276685e+01
	-2.022528430097736e-02	-2.022529060771179e-02	-2.022528456958769e-02
	-5.630891702545341e+00	-5.630891686684091e+00	-5.630891701835246e+00
	-1.023642111103982e-01	-1.023642372794745e-01	-1.023642121602394e-01
	1.723269193898886e+00	1.723269221893139e+00	1.723269194581461e+00
	-1.448809891007841e-02	-1.448811805654425e-02	-1.448809932827341e-02
	-3.661218684283085e-01	-3.661218606907913e-01	-3.661218680359143e-01
	8.663992373476503e-02	8.663992242377536e-02	8.663992367958594e-02

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>>
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