

1 The sieve of Erathostenes

2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21
22	23	24	25	26	27	28	29	30	31
32	33	34	35	36	37	38	39	40	41
42	43	44	45	46	47	48	49	50	51
52	53	54	55	56	57	58	59	60	61
62	63	64	65	66	67	68	69	70	71
72	73	74	75	76	77	78	79	80	81
82	83	84	85	86	87	88	89	90	91
92	93	94	95	96	97	98	99	100	

```

\pstVerb{
/prime? {
/n exch def
n 1 eq {false} { % 1 is not prime
n 2 mod 0 eq {n 2 eq} {
/divide? false def
3 2 n sqrt {
n exch div dup ceiling eq {/divide? true def exit} if
} for
divide? not } ifelse } ifelse
} bind def
}
\makeatletter
\begin{pspicture}(0,0)(10,-10)
\psgrid[subgriddiv=1,gridlabels=0pt]
\multido{\iA=2+1}{99}{%
\rput(! \iA\space 2 sub 10 mod /xVal ED
\iA\space 2 sub 10 div cvi neg /yVal ED
\iA\space prime? not {
gsave xVal yVal \tx@ScreenCoor translate

```

```
0 0 moveto 1 -1 \tx@ScreenCoor lineto
0 -1 \tx@ScreenCoor moveto 1 0 \tx@ScreenCoor lineto
1 setlinewidth 1 0 0 setrgbcolor stroke grestore } if
xVal 0.5 add yVal 0.5 sub ){\iA}
\end{pspicture}
```