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 Type ?license or ?licence to see the GPL; type ?warranty for warranty info. See <http://yacas.sf.net> for more information and documentation on Yacas.
 Type ?? for help. Or type ?function for help on a function.

To exit Yacas, enter Exit(); or quit or Ctrl-c.
 Type 'restart' to restart Yacas.

To see example commands, keep typing Example();

In> X1 := { 1, -3, (-3)^2, (-3)^3, (-3)^4, (-3)^5, (-3)^6 }

Out> {1,-3,9,-27,81,-243,729}

In> X2 := { 1, -2, (-2)^2, (-2)^3, (-2)^4, (-2)^5, (-2)^6 }

Out> {1,-2,4,-8,16,-32,64}

In> X3 := { 1, -1, (-1)^2, (-1)^3, (-1)^4, (-1)^5, (-1)^6 }

Out> {1,-1,1,-1,1,-1,1}

In> X4 := { 1, 0, 0, 0, 0, 0, 0 }

Out> {1,0,0,0,0,0,0}

In> X5 := { 1, 1, 1, 1, 1, 1, 1 }

Out> {1,1,1,1,1,1,1}

In> X6 := { 1, 2, 2^2, 2^3, 2^4, 2^5, 2^6 }

Out> {1,2,4,8,16,32,64}

In> X7 := { 1, 3, 3^2, 3^3, 3^4, 3^5, 3^6 }

Out> {1,3,9,27,81,243,729}

In> X := { X1, X2, X3, X4, X5, X6, X7 }

In> PrettyForm(X);

```

/
| ( 1 ) ( -3 ) ( 9 ) ( -27 ) ( 81 ) ( -243 ) ( 729 ) |
| ( 1 ) ( -2 ) ( 4 ) ( -8 ) ( 16 ) ( -32 ) ( 64 ) |
| ( 1 ) ( -1 ) ( 1 ) ( -1 ) ( 1 ) ( -1 ) ( 1 ) |
| ( 1 ) ( 0 ) ( 0 ) ( 0 ) ( 0 ) ( 0 ) ( 0 ) |
| ( 1 ) ( 1 ) ( 1 ) ( 1 ) ( 1 ) ( 1 ) ( 1 ) |
| ( 1 ) ( 2 ) ( 4 ) ( 8 ) ( 16 ) ( 32 ) ( 64 ) |
| ( 1 ) ( 3 ) ( 9 ) ( 27 ) ( 81 ) ( 243 ) ( 729 ) |
\

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Out> True

In> P := Inverse(X);

In> PrettyForm(P);

```
/
| ( 0 ) ( 0 ) ( 0 ) ( 1 ) ( 0 ) ( 0 ) ( 0 )
| / -1 \ / 3 \ / -3 \ ( 0 ) / 3 \ / -3 \ / 1 \
| | -- | | -- | | -- | | - | | -- | | -- |
| \ 60 / \ 20 / \ 4 / \ 4 / \ 20 / \ 60 /
|
| / 1 \ / -3 \ / 3 \ / -49 \ / 3 \ / -3 \ / 1 \
| | --- | | -- | | - | | --- | | - | | -- | | --- |
| \ 180 / \ 40 / \ 4 / \ 36 / \ 4 / \ 40 / \ 180 /
|
| / 1 \ / -1 \ / 13 \ ( 0 ) / -13 \ / 1 \ / -1 \
| | -- | | -- | | -- | | --- | | - | | -- |
| \ 48 / \ 6 / \ 48 / \ 48 / \ 6 / \ 48 /
|
| / -1 \ / 1 \ / -13 \ / 7 \ / -13 \ / 1 \ / -1 \
| | --- | | -- | | --- | | -- | | --- | | -- | | --- |
| \ 144 / \ 12 / \ 48 / \ 18 / \ 48 / \ 12 / \ 144 /
|
| / -1 \ / 1 \ / -1 \ ( 0 ) / 1 \ / -1 \ / 1 \
| | --- | | -- | | -- | | --- | | -- | | --- |
| \ 240 / \ 60 / \ 48 / \ 48 / \ 60 / \ 240 /
|
| / 1 \ / -1 \ / 1 \ / -1 \ / 1 \ / -1 \ / 1 \
| | --- | | --- | | -- | | -- | | -- | | --- | | --- |
| \ 720 / \ 120 / \ 48 / \ 36 / \ 48 / \ 120 / \ 720 /
\
```

Out> True

In> P * { 2, 2, 2, 2, 2, 2, 2 };

Out> {2,0,0,0,0,0,0}

In> quit;

Quitting...