

Sara Abdorab

Midterm

1.)

$$f := x \mapsto \frac{x^3 e^{\cos(x)}}{2 + x^4}$$

$$f := x \mapsto \frac{x^3 \cdot e^{\cos(x)}}{2 + x^4} \quad (1)$$

$$f := \frac{x^3 e^{\cos(x)}}{2 + x^4};$$

$$f_fourth_derivative := diff(f, x\$4);$$

$$fourth_derivative_at_pi := evalf(subs(x = Pi, f_fourth_derivative));$$

$$fourth_derivative_at_pi;$$

$$f := \frac{x^3 e^{\cos(x)}}{x^4 + 2}$$

$$\begin{aligned} f_fourth_derivative := & -\frac{192 x^9 \cos(x) e^{\cos(x)}}{(x^4 + 2)^3} + \frac{x^3 \sin(x)^4 e^{\cos(x)}}{x^4 + 2} + \frac{16 x^6 \sin(x)^3 e^{\cos(x)}}{(x^4 + 2)^2} \\ & + \frac{192 x^9 \sin(x)^2 e^{\cos(x)}}{(x^4 + 2)^3} + \frac{1536 x^{12} \sin(x) e^{\cos(x)}}{(x^4 + 2)^4} + \frac{6240 x^7 e^{\cos(x)}}{(x^4 + 2)^3} - \frac{24 \sin(x) e^{\cos(x)}}{x^4 + 2} \\ & - \frac{36 x \cos(x) e^{\cos(x)}}{x^4 + 2} + \frac{36 x \sin(x)^2 e^{\cos(x)}}{x^4 + 2} + \frac{816 x^4 \sin(x) e^{\cos(x)}}{(x^4 + 2)^2} \\ & + \frac{216 x^5 \cos(x) e^{\cos(x)}}{(x^4 + 2)^2} - \frac{12 x^2 \sin(x)^3 e^{\cos(x)}}{x^4 + 2} - \frac{216 x^5 \sin(x)^2 e^{\cos(x)}}{(x^4 + 2)^2} \\ & - \frac{2304 x^8 \sin(x) e^{\cos(x)}}{(x^4 + 2)^3} + \frac{12 x^2 \sin(x) e^{\cos(x)}}{x^4 + 2} + \frac{x^3 \cos(x) e^{\cos(x)}}{x^4 + 2} - \frac{4 x^3 \sin(x)^2 e^{\cos(x)}}{x^4 + 2} \\ & - \frac{16 x^6 \sin(x) e^{\cos(x)}}{(x^4 + 2)^2} - \frac{840 e^{\cos(x)} x^3}{(x^4 + 2)^2} - \frac{11520 x^{11} e^{\cos(x)}}{(x^4 + 2)^4} + \frac{6144 x^{15} e^{\cos(x)}}{(x^4 + 2)^5} \\ & - \frac{48 x^6 \cos(x) \sin(x) e^{\cos(x)}}{(x^4 + 2)^2} - \frac{6 x^3 \sin(x)^2 e^{\cos(x)} \cos(x)}{x^4 + 2} + \frac{3 x^3 \cos(x)^2 e^{\cos(x)}}{x^4 + 2} \end{aligned}$$

$$+ \frac{36 x^2 \cos(x) \sin(x) e^{\cos(x)}}{x^4 + 2}$$

$$fourth_derivative_at_pi := 0.3235820776$$

$$0.3235820776 \quad (2)$$

2.)a

$$f := x \mapsto \frac{(\arctan x)^6}{1 + x^2} dx$$

$$f := x \mapsto \frac{\arctan^6 \cdot x^6 \cdot dx}{1 + x^2} \quad (3)$$

$$int(f(x), x)$$

$$\frac{\arctan^6 dx x^5}{5} - \frac{\arctan^6 dx x^3}{3} + \arctan^6 dx x - \arctan^6 dx \arctan(x) \quad (4)$$

$$Int(f(x), x)$$

$$\int \frac{\arctan^6 x^6 dx}{x^2 + 1} dx \quad (5)$$

2.)b

$$g := x \mapsto Int\left(\frac{(\arctan x)^6}{1 + x^2} dx, x = 1 .. 3\right);$$

$$g := x \mapsto \int_1^3 \frac{\arctan^6 \cdot x^6 \cdot dx}{1 + x^2} dx \quad (6)$$

$$int(g(x), x)$$

$$x \left(\int_1^3 \frac{\arctan^6 x^6 dx}{x^2 + 1} dx \right) \quad (7)$$

$$Int(g(x), x)$$

$$\int \left(\int_1^3 \frac{\arctan^6 x^6 dx}{x^2 + 1} dx \right) dx \quad (8)$$

3.)

```
f := log(6 * x^4 - 2 * x^3 + 10);
tangent_line := tangent(f, x = -4);
normal_line := normal(f, x = -4);
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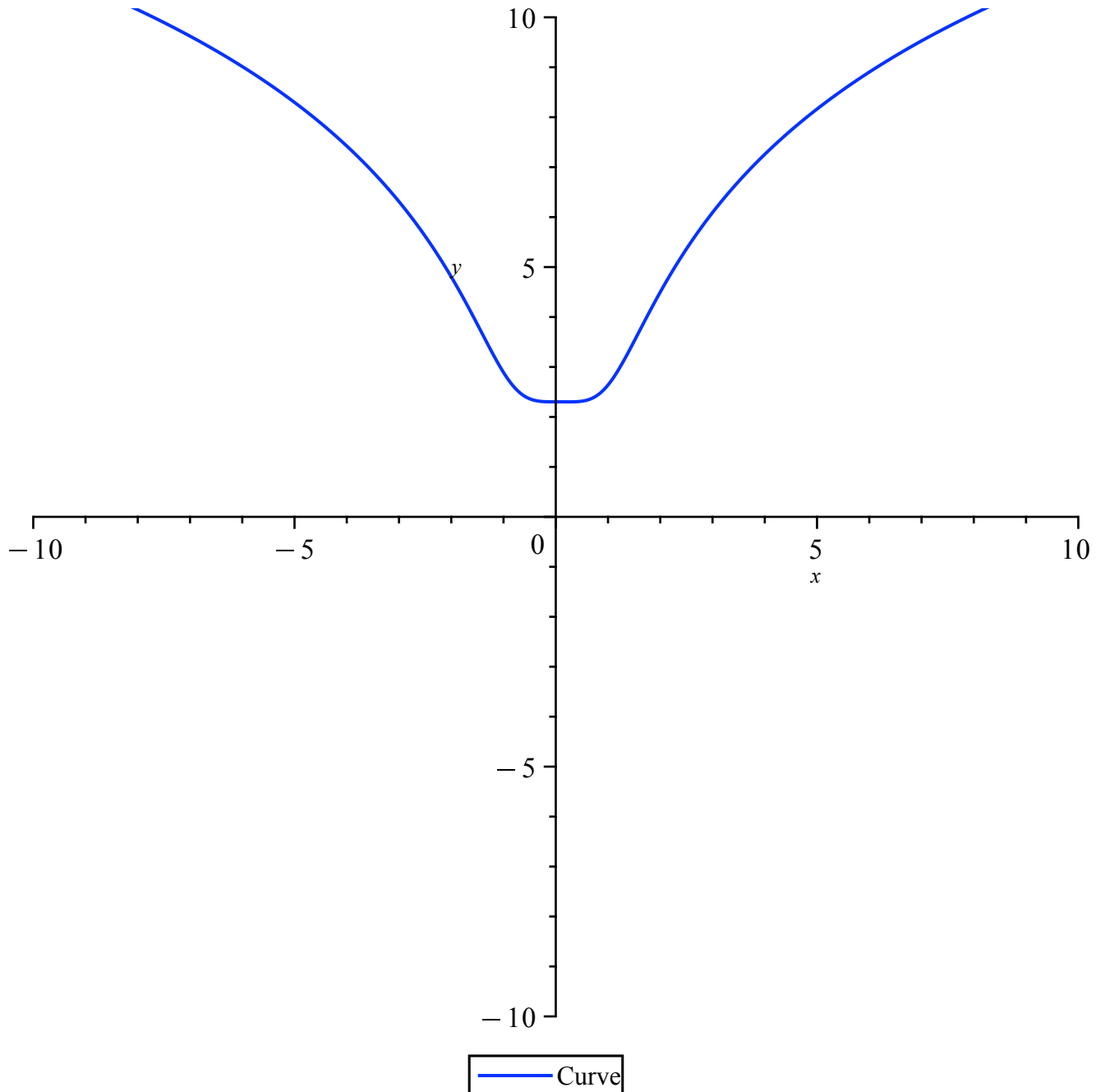
```
plot([f, tangent_line, normal_line], x = -10 .. 10, y = -10 .. 10, color = [blue, red, green], legend
= ["Curve", "Tangent Line", "Normal Line"]);
```

$$f := \ln(6x^4 - 2x^3 + 10)$$

$$\text{tangent_line} := \text{tangent}(\ln(6x^4 - 2x^3 + 10), x = -4)$$

Error, invalid input: normal does not recognize the option x = -4

Warning, expecting only range variable x in expression tangent(ln(6*x^4 - 2*x^3+10), x = -4) to be plotted but found name tangent



4.)a

$$f := x \mapsto \frac{e^x + e^{-x}}{2}$$

$$f := x \mapsto \frac{e^x}{2} + \frac{e^{-x}}{2} \quad (9)$$

$$g := x \mapsto 21 - 3x^3 - 2x^6$$

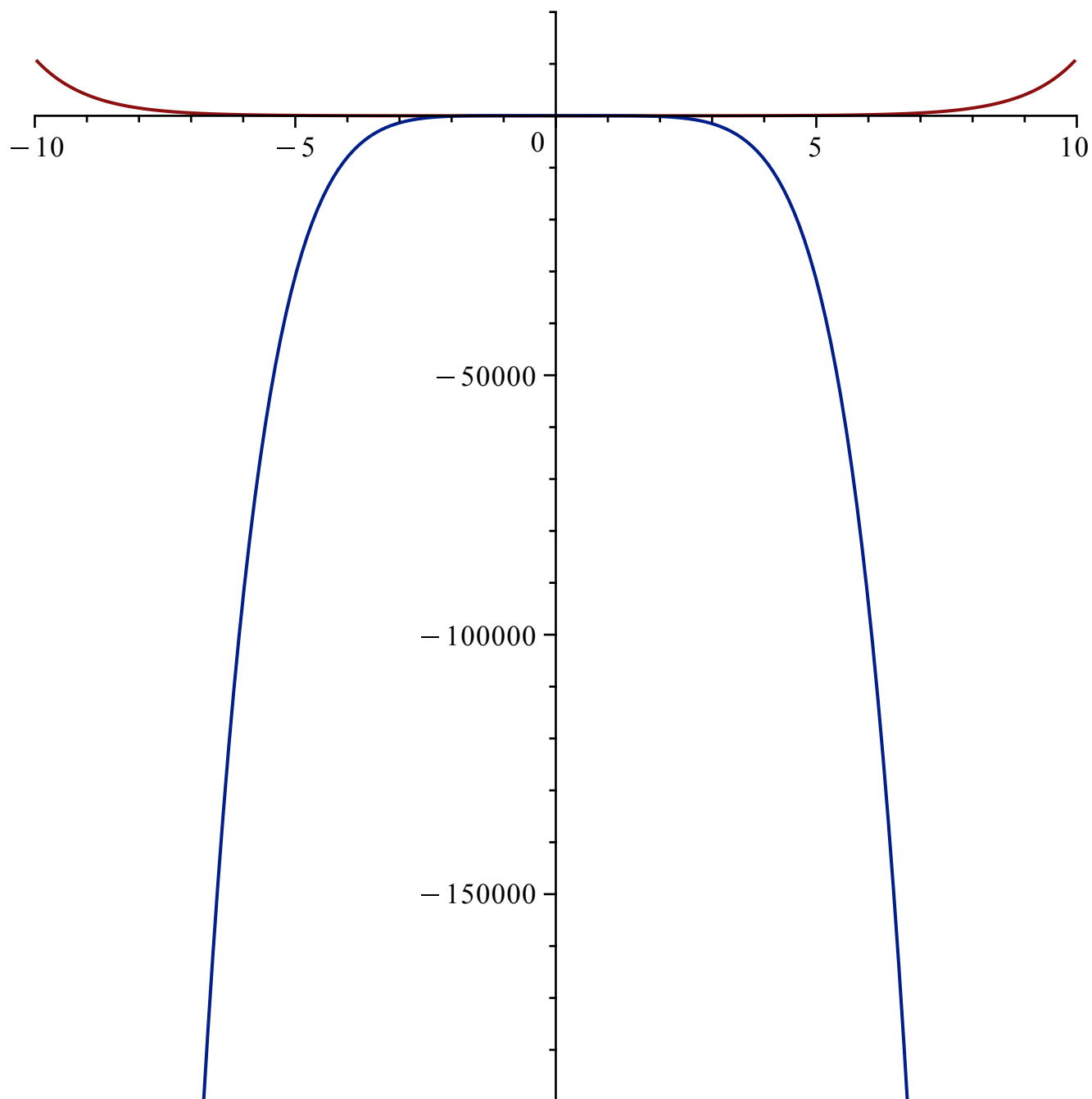
$$g := x \mapsto 21 - 3 \cdot x^3 - 2 \cdot x^6 \quad (10)$$

with(plots)

[*animate, animate3d, animatecurve, arrow, changecoords, complexplot, complexplot3d, conformal, (11)*

conformal3d, contourplot, contourplot3d, coordplot, coordplot3d, densityplot, display, dualaxisplot, fieldplot, fieldplot3d, gradplot, gradplot3d, implicitplot, implicitplot3d, inequal, interactive, interactiveparams, intersectplot, listcontplot, listcontplot3d, listdensityplot, listplot, listplot3d, loglogplot, logplot, matrixplot, multiple, odeplot, pareto, plotcompare, pointplot, pointplot3d, polarplot, polygonplot, polygonplot3d, polyhedra_supported, polyhedraplot, rootlocus, semilogplot, setcolors, setoptions, setoptions3d, shadebetween, spacecurve, sparsematrixplot, surfdata, textplot, textplot3d, tubeplot]

plot({f,g});



4.)b

$$fI := \frac{e^x + e^{-x}}{2};$$

$$fI := \frac{e^x}{2} + \frac{e^{-x}}{2}$$

(12)

$$f2 := \frac{21 - 3x^3 - 2x^6}{2};$$

$$f2 := -x^6 - \frac{3}{2}x^3 + \frac{21}{2} \quad (13)$$

$$fsolve(\{f1 = 0, f2 = 0\});$$

$$fsolve\left(\left\{\frac{e^x}{2} + \frac{e^{-x}}{2} = 0, -x^6 - \frac{3}{2}x^3 + \frac{21}{2} = 0\right\}, \{x, y\}\right) \quad (14)$$

4.) c

$$f := \frac{e^x + e^{-x}}{2};$$

$$f := \frac{e^x}{2} + \frac{e^{-x}}{2} \quad (15)$$

$$g := \frac{21 - 3x^3 - 2x^6}{2};$$

$$g := -x^6 - \frac{3}{2}x^3 + \frac{21}{2} \quad (16)$$

$$a := 0;$$

$$b := 1;$$

$$area := \text{int}(f - g, x = a .. b);$$

$$a := 0$$

$$b := 1$$

$$area := -\frac{559}{56} + \frac{e}{2} - \frac{e^{-1}}{2} \quad (17)$$

5.) a

$$f := -x^4 + x^3 + 13 \cdot x^2 + 12 \cdot x - 11;$$

$$f := -x^4 + x^3 + 13x^2 + 12x - 11 \quad (18)$$

$$x_intercepts := \text{solve}(f = 0, x);$$

$$x_intercepts := \text{RootOf}(_Z^4 - _Z^3 - 13_Z^2 - 12_Z + 11, \text{index} = 1), \text{RootOf}(_Z^4 - _Z^3 - 13_Z^2 - 12_Z + 11, \text{index} = 2), \text{RootOf}(_Z^4 - _Z^3 - 13_Z^2 - 12_Z + 11, \text{index} = 3), \text{RootOf}(_Z^4 - _Z^3 - 13_Z^2 - 12_Z + 11, \text{index} = 4) \quad (19)$$

$$y_intercept := \text{subs}(x = 0, f);$$

$$y_intercept := -11 \quad (20)$$

5.) b

$$f := -x^4 + x^3 + 13 \cdot x^2 + 12 \cdot x - 11;$$

$$f := -x^4 + x^3 + 13 x^2 + 12 x - 11 \quad (21)$$

$$\text{critical_points} := \text{solve}(\text{diff}(f, x) = 0, x);$$

$$\text{critical_points} := \frac{(4023 + 12 I \sqrt{117303})^{1/3}}{12} + \frac{107}{4 (4023 + 12 I \sqrt{117303})^{1/3}} + \frac{1}{4}, \quad (22)$$

$$\begin{aligned} & - \frac{(4023 + 12 I \sqrt{117303})^{1/3}}{24} - \frac{107}{8 (4023 + 12 I \sqrt{117303})^{1/3}} + \frac{1}{4} \\ & + \frac{I \sqrt{3} \left(\frac{(4023 + 12 I \sqrt{117303})^{1/3}}{12} - \frac{107}{4 (4023 + 12 I \sqrt{117303})^{1/3}} \right)}{2}, \\ & - \frac{(4023 + 12 I \sqrt{117303})^{1/3}}{24} - \frac{107}{8 (4023 + 12 I \sqrt{117303})^{1/3}} + \frac{1}{4} \\ & - \frac{I \sqrt{3} \left(\frac{(4023 + 12 I \sqrt{117303})^{1/3}}{12} - \frac{107}{4 (4023 + 12 I \sqrt{117303})^{1/3}} \right)}{2} \end{aligned}$$

5.) c

$$f := -x^4 + x^3 + 13 \cdot x^2 + 12 \cdot x - 11;$$

$$f_second_derivative := \text{diff}(f, x, x);$$

$$\text{inflection_points} := \text{solve}(f_second_derivative = 0, x);$$

$$\text{inflection_points};$$

$$f := -x^4 + x^3 + 13 x^2 + 12 x - 11$$

$$f_second_derivative := -12 x^2 + 6 x + 26$$

$$\text{inflection_points} := \frac{1}{4} - \frac{\sqrt{321}}{12}, \frac{1}{4} + \frac{\sqrt{321}}{12}$$

$$\frac{1}{4} - \frac{\sqrt{321}}{12}, \frac{1}{4} + \frac{\sqrt{321}}{12} \quad (23)$$

5.) d

$$\begin{aligned}
&f := -x^4 + x^3 + 13 \cdot x^2 + 12 \cdot x - 11; \\
&f_derivative := diff(f, x); \\
&critical_points := solve(f_derivative = 0, x); \\
&intervals := solvetools:-inequal(f_derivative > 0, x); \\
&increasing_intervals := select(type, intervals, (x) \rightarrow x > 0); \\
&decreasing_intervals := select(type, intervals, (x) \rightarrow x < 0); \\
&increasing_intervals, decreasing_intervals; \\
&\quad f := -x^4 + x^3 + 13 x^2 + 12 x - 11 \\
&\quad f_derivative := -4 x^3 + 3 x^2 + 26 x + 12 \\
&critical_points := \frac{(4023 + 12 I \sqrt{117303})^{1/3}}{12} + \frac{107}{4 (4023 + 12 I \sqrt{117303})^{1/3}} + \frac{1}{4}, \\
&\quad - \frac{(4023 + 12 I \sqrt{117303})^{1/3}}{24} - \frac{107}{8 (4023 + 12 I \sqrt{117303})^{1/3}} + \frac{1}{4} \\
&\quad + \frac{I \sqrt{3} \left(\frac{(4023 + 12 I \sqrt{117303})^{1/3}}{12} - \frac{107}{4 (4023 + 12 I \sqrt{117303})^{1/3}} \right)}{2}, \\
&\quad - \frac{(4023 + 12 I \sqrt{117303})^{1/3}}{24} - \frac{107}{8 (4023 + 12 I \sqrt{117303})^{1/3}} + \frac{1}{4} \\
&\quad - \frac{I \sqrt{3} \left(\frac{(4023 + 12 I \sqrt{117303})^{1/3}}{12} - \frac{107}{4 (4023 + 12 I \sqrt{117303})^{1/3}} \right)}{2} \\
&\quad increasing_intervals, decreasing_intervals
\end{aligned}$$

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5.) e

$$\begin{aligned}
&f := -x^4 + x^3 + 13 \cdot x^2 + 12 \cdot x - 11; \\
&f_second_derivative := diff(f, x, x); \\
&critical_points := solve(f_second_derivative = 0, x); \\
&intervals := solvetools:-inequal(f_second_derivative > 0, x); \\
&concave_up_intervals := select(type, intervals, (x) \rightarrow x > 0); \\
&concave_down_intervals := select(type, intervals, (x) \rightarrow x < 0);
\end{aligned}$$

concave_up_intervals, concave_down_intervals;

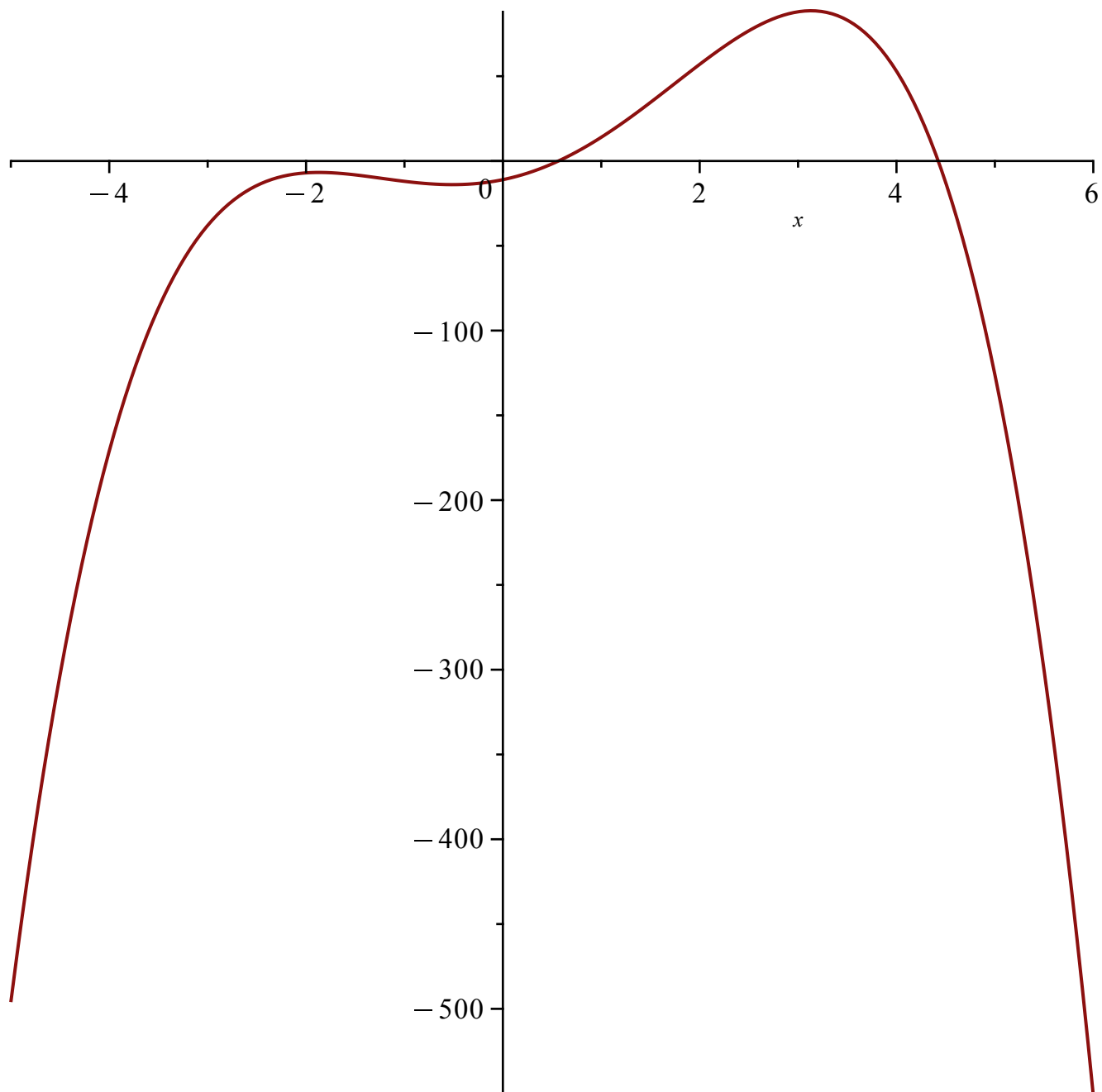
$$f := -x^4 + x^3 + 13x^2 + 12x - 11$$

$$f_second_derivative := -12x^2 + 6x + 26$$

$$critical_points := \frac{1}{4} - \frac{\sqrt{321}}{12}, \frac{1}{4} + \frac{\sqrt{321}}{12} \quad (25)$$

5.) d

plot($-x^4 + x^3 + 13 \cdot x^2 + 12 \cdot x - 11$)



6.)

$$f1 := x^2 - 3 \cdot x \cdot y - 7 \cdot y^3 = 1;$$

$$f2 := 7 \cdot x^2 + 3 \cdot x \cdot y - 2 \cdot y^2 = 1;$$

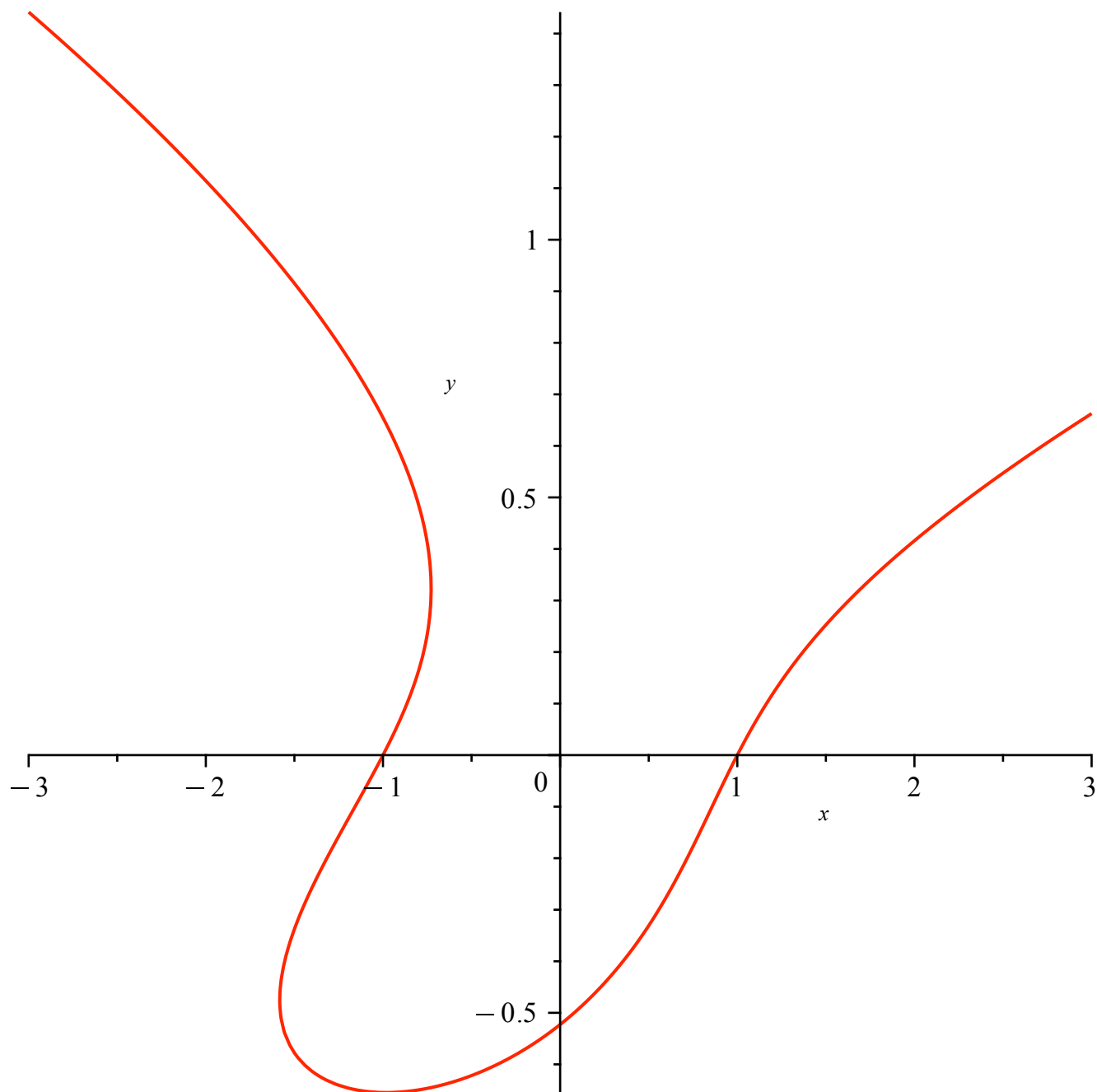
$$plot1 := \text{implicitplot}(f1, x = -3 \dots 3, y = -3 \dots 3, \text{color} = \text{red});$$

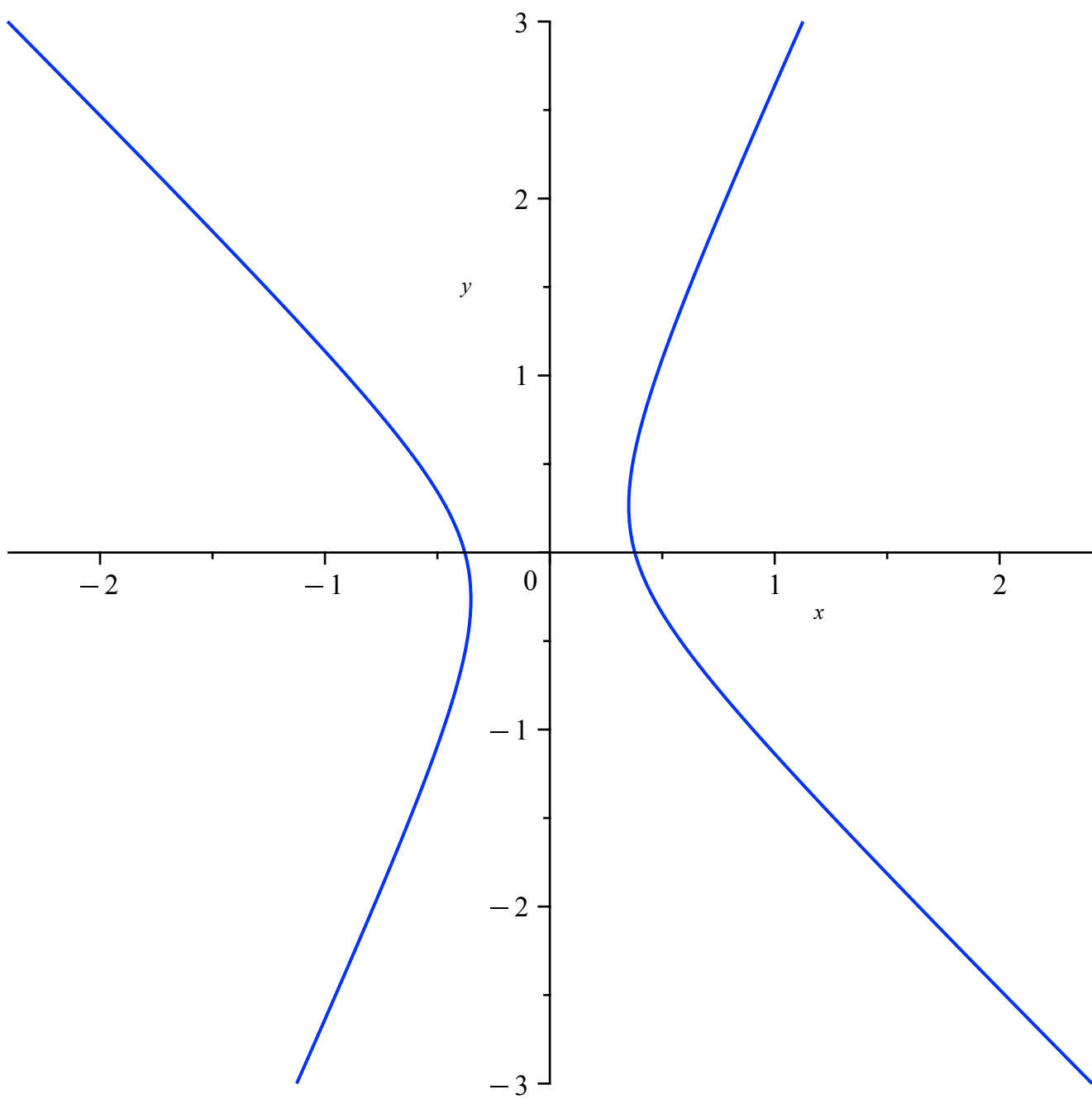
$$plot2 := \text{implicitplot}(f2, x = -3 \dots 3, y = -3 \dots 3, \text{color} = \text{blue});$$

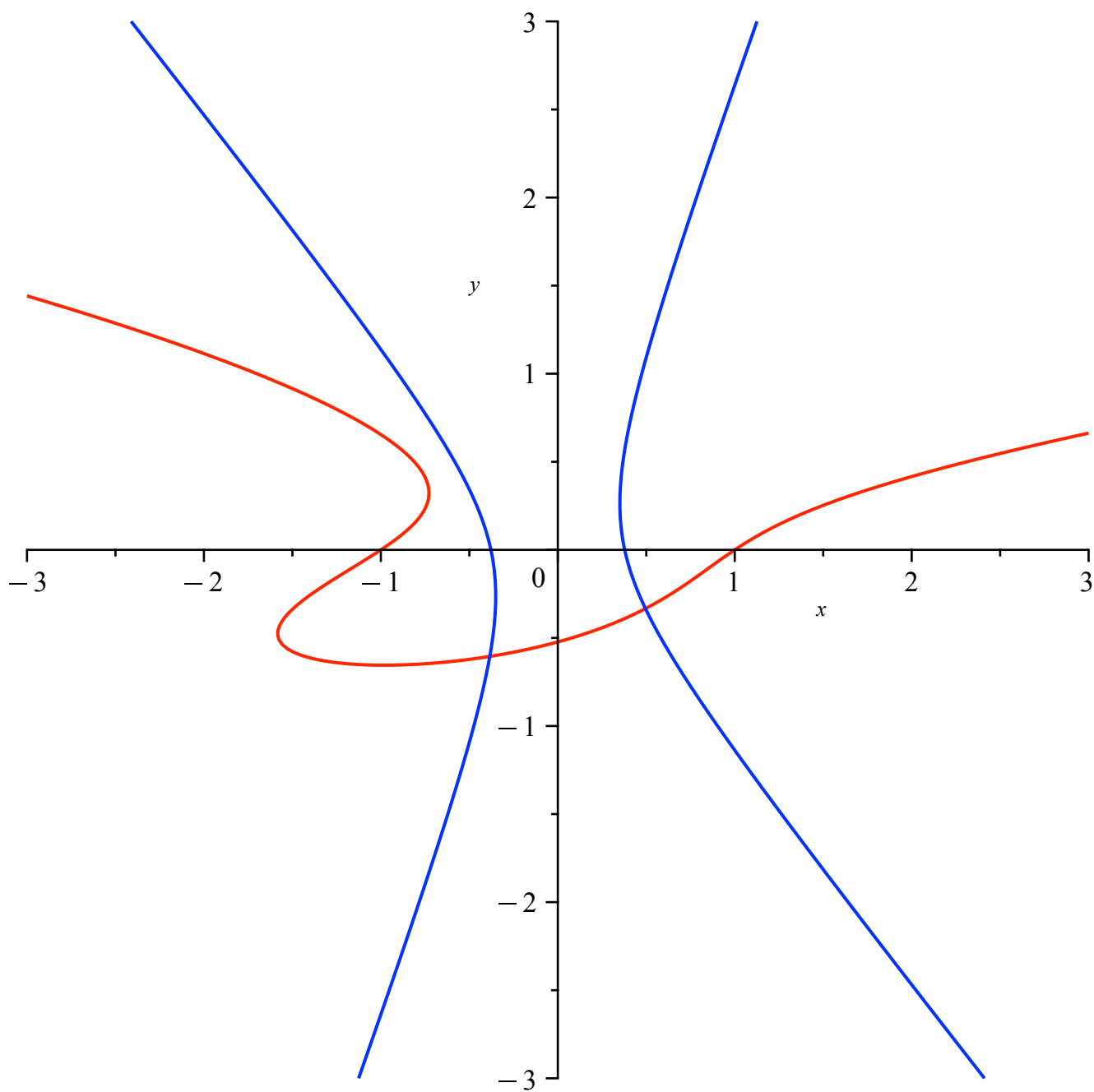
$$\text{display}(plot1, plot2);$$

$$f1 := -7 y^3 + x^2 - 3 x y = 1$$

$$f2 := 7 x^2 + 3 x y - 2 y^2 = 1$$







7.)

```
u[1] := 9;  
u[2] := 0;  
u[3] := -1;
```

Calculate the terms up to the 30th term

for n **from** 4 **to** 30 **do**

$u[n] := 5 * u[n-1] - 6 * u[n-2] - u[n-3];$
end do;

Display the 30th term

$u[30];$

$$u_1 := 9$$

$$u_2 := 0$$

$$u_3 := -1$$

$$u_4 := -14$$

$$u_5 := -64$$

$$u_6 := -235$$

$$u_7 := -777$$

$$u_8 := -2411$$

$$u_9 := -7158$$

$$u_{10} := -20547$$

$$u_{11} := -57376$$

$$u_{12} := -156440$$

$$u_{13} := -417397$$

$$u_{14} := -1090969$$

$$u_{15} := -2794023$$

$$u_{16} := -7006904$$

$$u_{17} := -17179413$$

$$u_{18} := -41061618$$

$$u_{19} := -95224708$$

$$u_{20} := -212574419$$

$$u_{21} := -450462229$$

$$u_{22} := -881639923$$

$$u_{23} := -1492851822$$

$$u_{24} := -1723957343$$

$$u_{25} := 1218964140$$

```

u26 := 17931416580
u27 := 84067255403
u28 := 311528813395
u29 := 1035309117977
u30 := 3223305454112
3223305454112

```

(26)

8.)

```

f := 1 / sqrt(1 - x);

P1 := fseries(f, x = 0, 2);
P2 := fseries(f, x = 0, 4);
P3 := fseries(f, x = 0, 6);

plot([f, P1, P2, P3], x = -0.9 .. 0.9, y = -10 .. 10, color = [blue, red, green,
purple], legend = ["f(x)", "P1(x)", "P2(x)", "P3(x)"]);

```

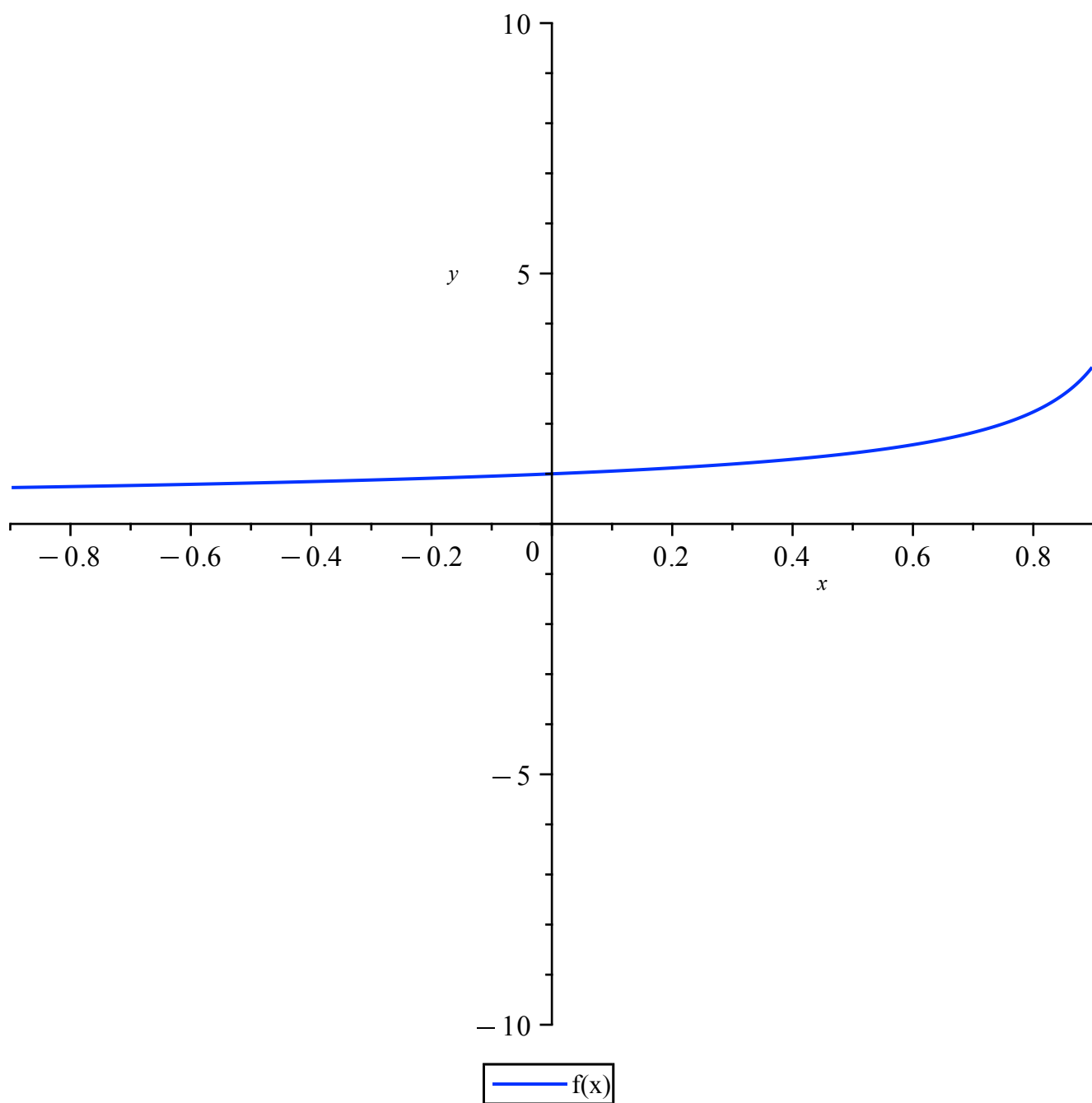
$$f := \frac{1}{\sqrt{1-x}}$$

$$P1 := fseries\left(\frac{1}{\sqrt{1-x}}, x = 0, 2\right)$$

$$P2 := fseries\left(\frac{1}{\sqrt{1-x}}, x = 0, 4\right)$$

$$P3 := fseries\left(\frac{1}{\sqrt{1-x}}, x = 0, 6\right)$$

Warning, expecting only range variable x in expression fseries(1/(1-x)^(1/2), x = 0, 2) to be plotted but found name fseries



9.)

`limit(7^(1/n), n = infinity);`

Error, invalid input: limit expects its 2nd argument, p, to be of type Or(name = algebraic, set(name = algebraic), list(name = algebraic)), but received 2 = infinity

10.)

count := 0;

count := 0 (27)

for *n* **from** 1 **to** 400 **do**

num := 3 * *n* ^ 2 + 7 * *n* - 7;

is_prime := *isprime*(*num*);

if *is_prime* **then**

count := *count* + 1;

end if;

end do;

count;

num := 3 (28)

is_prime := true (28)

num := 19 (28)

is_prime := true (28)

num := 41 (28)

is_prime := true (28)

num := 69 (28)

is_prime := false (28)

num := 103 (28)

is_prime := true (28)

num := 143 (28)

is_prime := false (28)

num := 189 (28)

is_prime := false (28)

num := 241 (28)

is_prime := true (28)

num := 299 (28)

is_prime := false (28)

num := 363 (28)

is_prime := false (28)

| | |
|---------------------------------|------|
| <i>num</i> := 433 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 509 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 591 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 679 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 773 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 873 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 979 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 1091 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 1209 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 1333 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 1463 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 1599 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 1741 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 1889 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 2043 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 2203 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 2369 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

| | |
|---------------------------------|------|
| <i>num</i> := 2541 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 2719 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 2903 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 3093 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 3289 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 3491 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 3699 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 3913 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 4133 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 4359 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 4591 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 4829 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 5073 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 5323 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 5579 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 5841 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 6109 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

| | |
|---------------------------------|------|
| <i>num</i> := 6383 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 6663 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 6949 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 7241 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 7539 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 7843 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 8153 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 8469 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 8791 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 9119 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 9453 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 9793 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 10139 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 10491 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 10849 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 11213 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 11583 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

| | |
|---------------------------------|------|
| <i>num</i> := 11959 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 12341 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 12729 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 13123 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 13523 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 13929 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 14341 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 14759 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 15183 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 15613 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 16049 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 16491 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 16939 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 17393 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 17853 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 18319 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 18791 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

| | |
|---------------------------------|------|
| <i>num</i> := 19269 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 19753 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 20243 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 20739 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 21241 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 21749 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 22263 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 22783 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 23309 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 23841 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 24379 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 24923 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 25473 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 26029 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 26591 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 27159 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 27733 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 28313 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 28899 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 29491 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 30089 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 30693 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 31303 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 31919 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 32541 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 33169 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 33803 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 34443 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 35089 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 35741 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 36399 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 37063 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 37733 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 38409 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 39091 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 39779 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 40473 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 41173 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 41879 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 42591 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 43309 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 44033 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 44763 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 45499 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 46241 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 46989 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 47743 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 48503 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 49269 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 50041 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 50819 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 51603 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 52393 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 53189 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 53991 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 54799 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 55613 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 56433 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 57259 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 58091 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 58929 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 59773 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 60623 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 61479 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 62341 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 63209 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 64083 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 64963 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 65849 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 66741 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 67639 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 68543 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 69453 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 70369 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 71291 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 72219 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 73153 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 74093 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 75039 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 75991 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 76949 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 77913 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 78883 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 79859 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 80841 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 81829 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 82823 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 83823 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 84829 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 85841 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 86859 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 87883 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 88913 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 89949 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 90991 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 92039 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 93093 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 94153 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 95219 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 96291 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 97369 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 98453 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 99543 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 100639 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 101741 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 102849 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 103963 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 105083 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 106209 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 107341 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 108479 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 109623 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 110773 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 111929 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 113091 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 114259 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 115433 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 116613 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 117799 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

| | |
|---------------------------------|------|
| <i>num</i> := 118991 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 120189 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 121393 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 122603 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 123819 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 125041 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 126269 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 127503 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 128743 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 129989 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 131241 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 132499 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 133763 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 135033 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 136309 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 137591 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 138879 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

| | |
|---------------------------------|------|
| <i>num</i> := 140173 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 141473 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 142779 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 144091 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 145409 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 146733 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 148063 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 149399 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 150741 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 152089 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 153443 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 154803 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 156169 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 157541 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 158919 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 160303 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 161693 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 163089 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 164491 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 165899 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 167313 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 168733 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 170159 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 171591 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 173029 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 174473 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 175923 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 177379 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 178841 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 180309 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 181783 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 183263 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 184749 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 186241 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 187739 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 189243 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 190753 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 192269 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 193791 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 195319 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 196853 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 198393 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 199939 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 201491 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 203049 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 204613 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 206183 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 207759 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 209341 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 210929 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 212523 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

| | |
|---------------------------------|------|
| <i>num</i> := 214123 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 215729 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 217341 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 218959 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 220583 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 222213 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 223849 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 225491 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 227139 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 228793 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 230453 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 232119 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 233791 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 235469 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 237153 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 238843 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 240539 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 242241 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 243949 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 245663 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 247383 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 249109 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 250841 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 252579 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 254323 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 256073 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 257829 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 259591 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 261359 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 263133 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 264913 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 266699 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 268491 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 270289 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 272093 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 273903 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 275719 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 277541 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 279369 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 281203 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 283043 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 284889 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 286741 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 288599 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 290463 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 292333 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 294209 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 296091 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 297979 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 299873 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 301773 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 303679 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 305591 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 307509 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 309433 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 311363 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 313299 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 315241 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 317189 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 319143 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 321103 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 323069 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 325041 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 327019 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 329003 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 330993 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 332989 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 334991 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 336999 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 339013 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 341033 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 343059 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 345091 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 347129 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 349173 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 351223 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 353279 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 355341 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 357409 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 359483 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 361563 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 363649 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 365741 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 367839 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 369943 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 372053 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 374169 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 376291 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 378419 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 380553 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 382693 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 384839 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 386991 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 389149 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 391313 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 393483 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 395659 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 397841 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 400029 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 402223 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 404423 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 406629 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

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|---------------------------------|------|
| <i>num</i> := 408841 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 411059 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 413283 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 415513 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 417749 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 419991 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 422239 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 424493 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 426753 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 429019 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 431291 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 433569 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 435853 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 438143 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 440439 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 442741 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 445049 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |

| | |
|---------------------------------|------|
| <i>num</i> := 447363 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 449683 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 452009 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 454341 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 456679 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 459023 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 461373 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 463729 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 466091 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 468459 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 470833 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 473213 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 475599 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 477991 | (28) |
| <i>is_prime</i> := <i>true</i> | (28) |
| <i>num</i> := 480389 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| <i>num</i> := 482793 | (28) |
| <i>is_prime</i> := <i>false</i> | (28) |
| 95 | (28) |

