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STUDENT > f(-2);f(8/3);evalf(f(8/3));f(1/3);evalf(f(1/3));
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$$f(-2) = 6$$

$$f(8/3) = -2.469135802 = \frac{-200}{81}$$

$$f(1/3) = 1.765432099 = \frac{143}{81}$$

Les coordonnées du point I centre de symétrie de la courbe sont donc $x = 1/3$ et $y = 143/81$

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STUDENT > g:=x->2*(x + 1)^2/(x^2 - 2*x - 15);  
g1(x):=factor(diff(g(x),x));  
plot([g(x),2,[[ -3,8],[ -3,-4]],[[5,8],[5,-4]]],x=-10..14,  
y=-4..8,thickness=2);
```

$$g := x \rightarrow 2 \frac{(x+1)^2}{x^2 - 2x - 15}$$
$$g1(x) := -8 \frac{(x+1)(x+7)}{(x+3)^2(x-5)^2}$$

