










Another Approach









① Existing Technology

- Embedded bitmaps
- HTML Text
- MathML

	HTML Text	Images	Plugins & Applets
<i>Quality</i>			
<i>Resolution</i>			
<i>Document Size</i>			

Approach for Displaying Mathematics on the Web

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Applets	MathML plugin	SVG
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)		
		

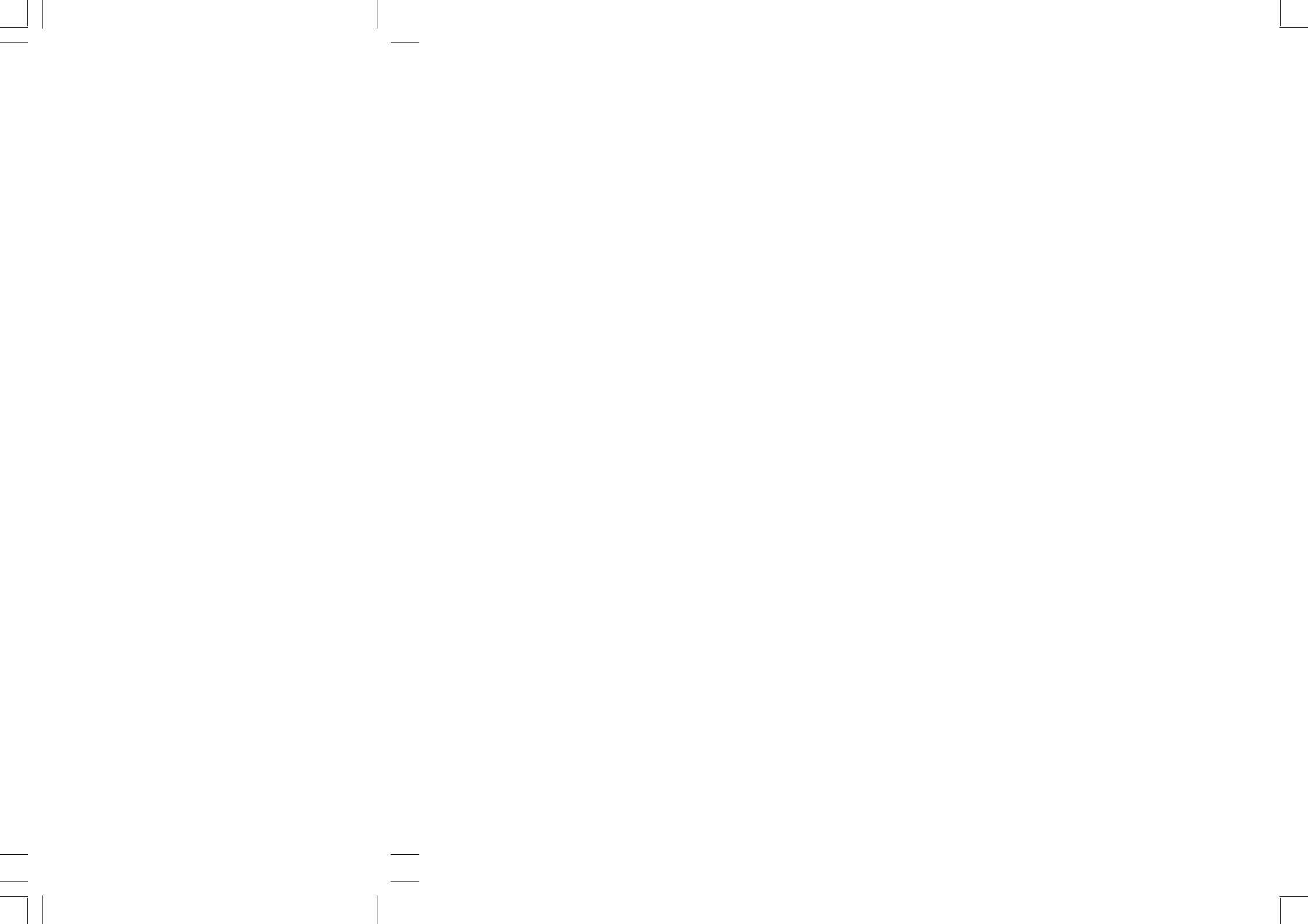
Web: MathML Content to SVG

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↗ In HTML

$$r(t) = A \left(1 - \frac{e^{-\gamma t} \sin(\omega \sqrt{1-m^2} t - \Psi)}{\sqrt{1-m^2}} \right)$$



- MathML
- Plugins and applets
- SVG

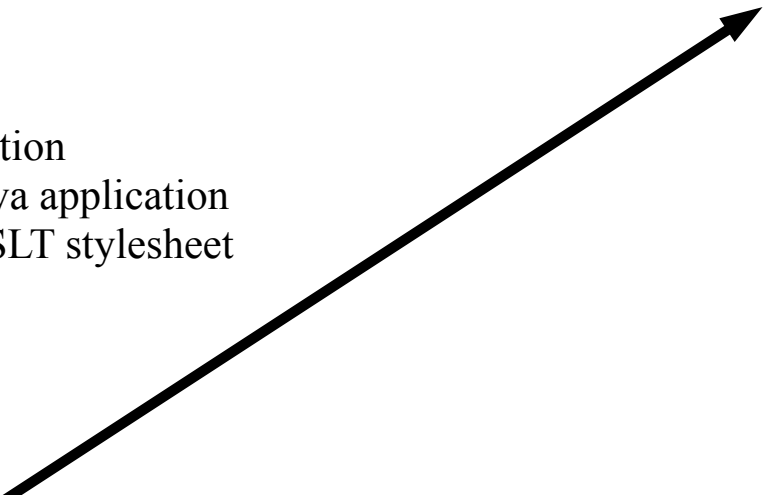
			
<i>Interactivity</i>			
<i>Standard Format</i>			
<i>Fonts</i>			

② MathML

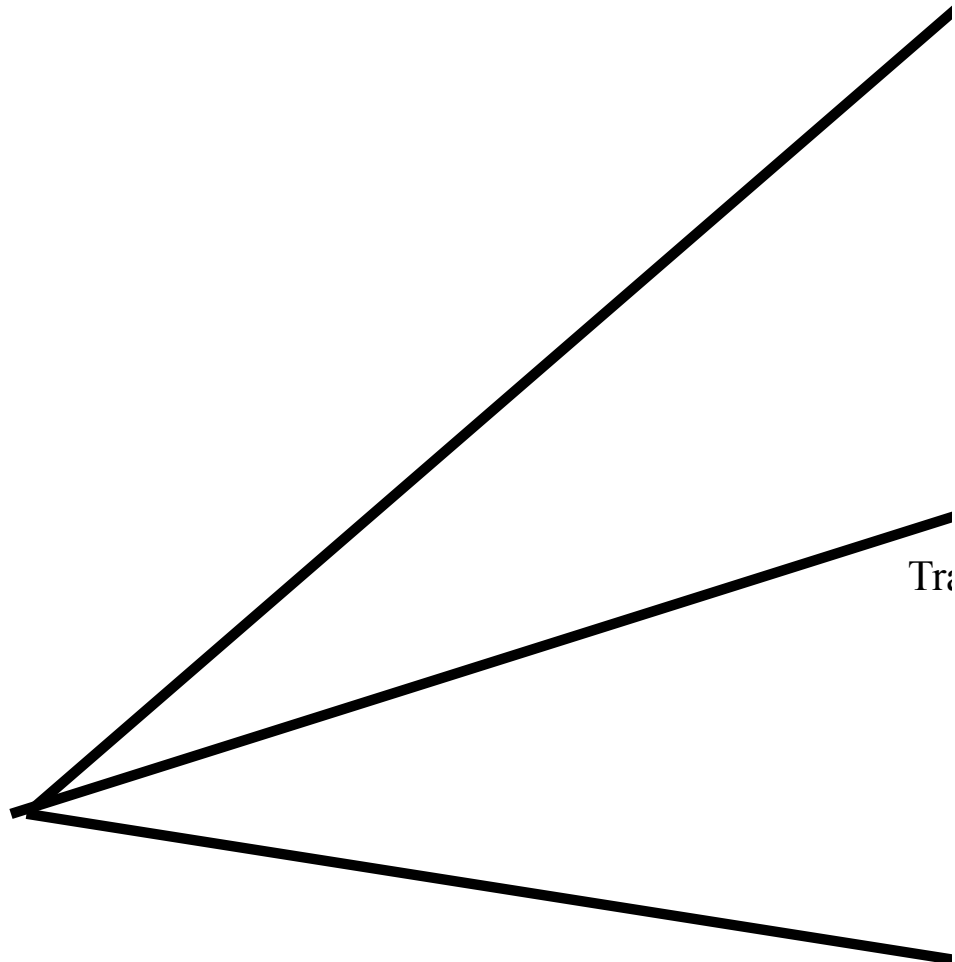
- Emerging representation standard
- MathML content
- MathML presentation
- How to display?
 - Plugins and applets
 - SVG

③ Trai

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☹	☹	☺



SVG



Transformation

- Java application
- XSLT stylesheet

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In HTML

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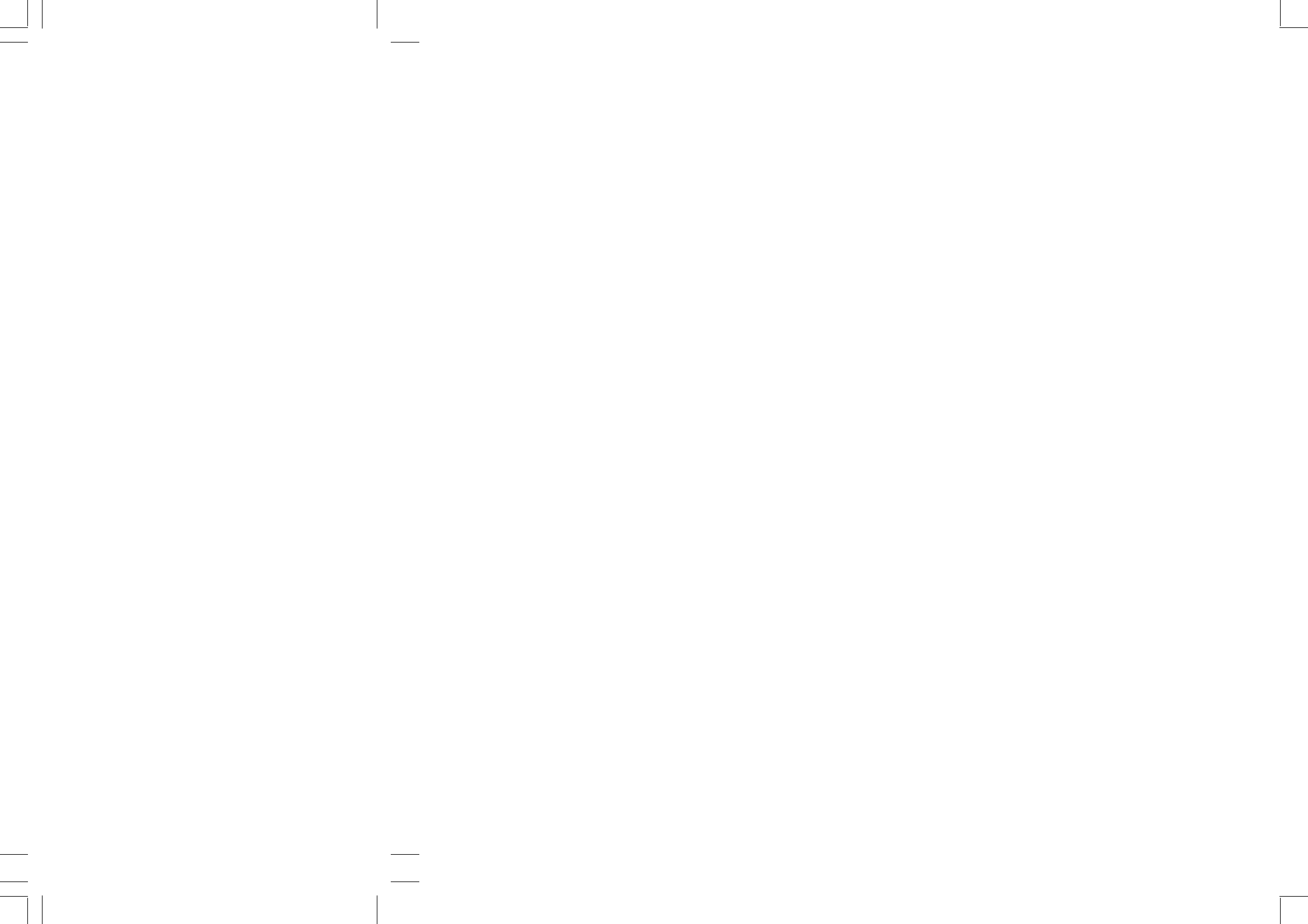
In PDF

Transformation

- Formatting object

In composite SVG diagram

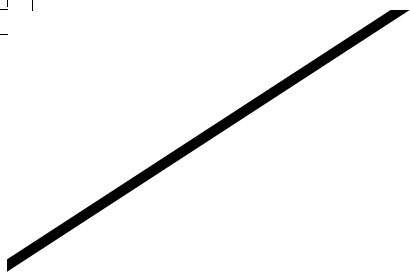
- Into HTML as above
- Into PDF as above



- Plugins and applets
- SVG

Content MathML

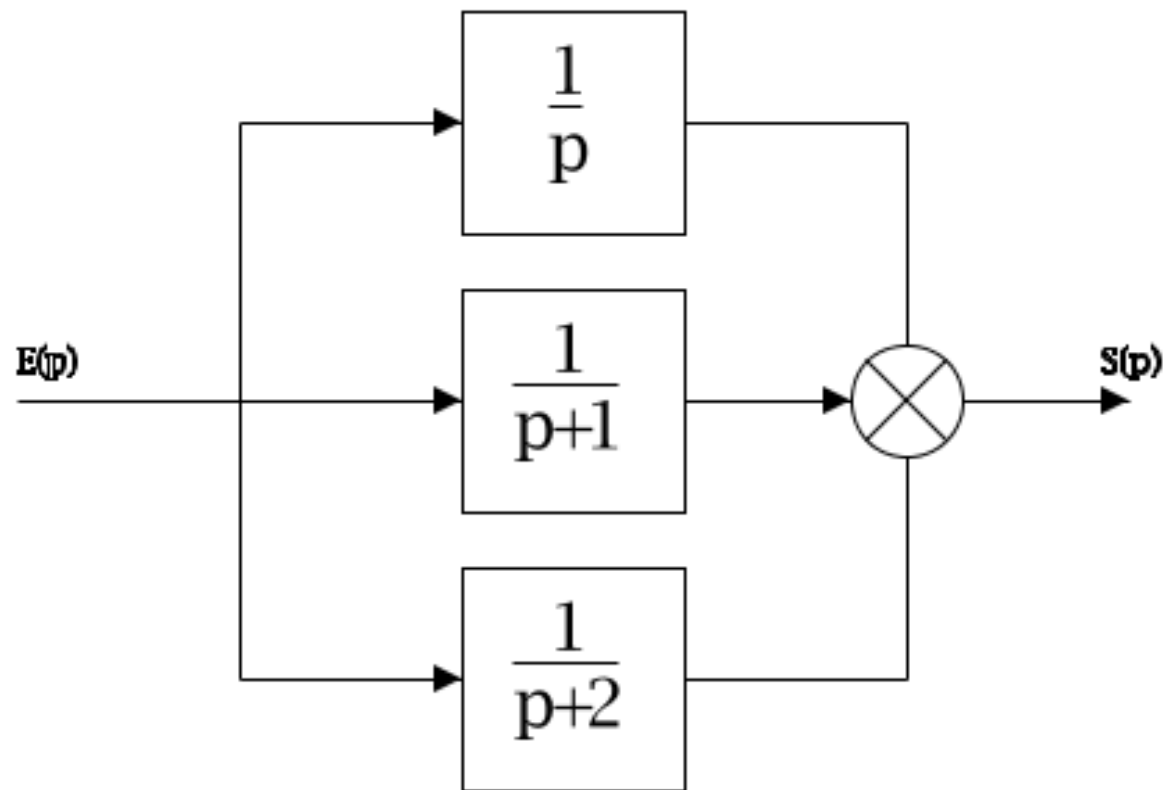
```
<math>
...
  <apply>
    <root/>
    <apply>
      <minus/><cn>1</cn>
      <apply>
        <power/><ci>m</ci><cn>2</cn>
      </apply>
    </apply>
  </apply>
...
</math>
```



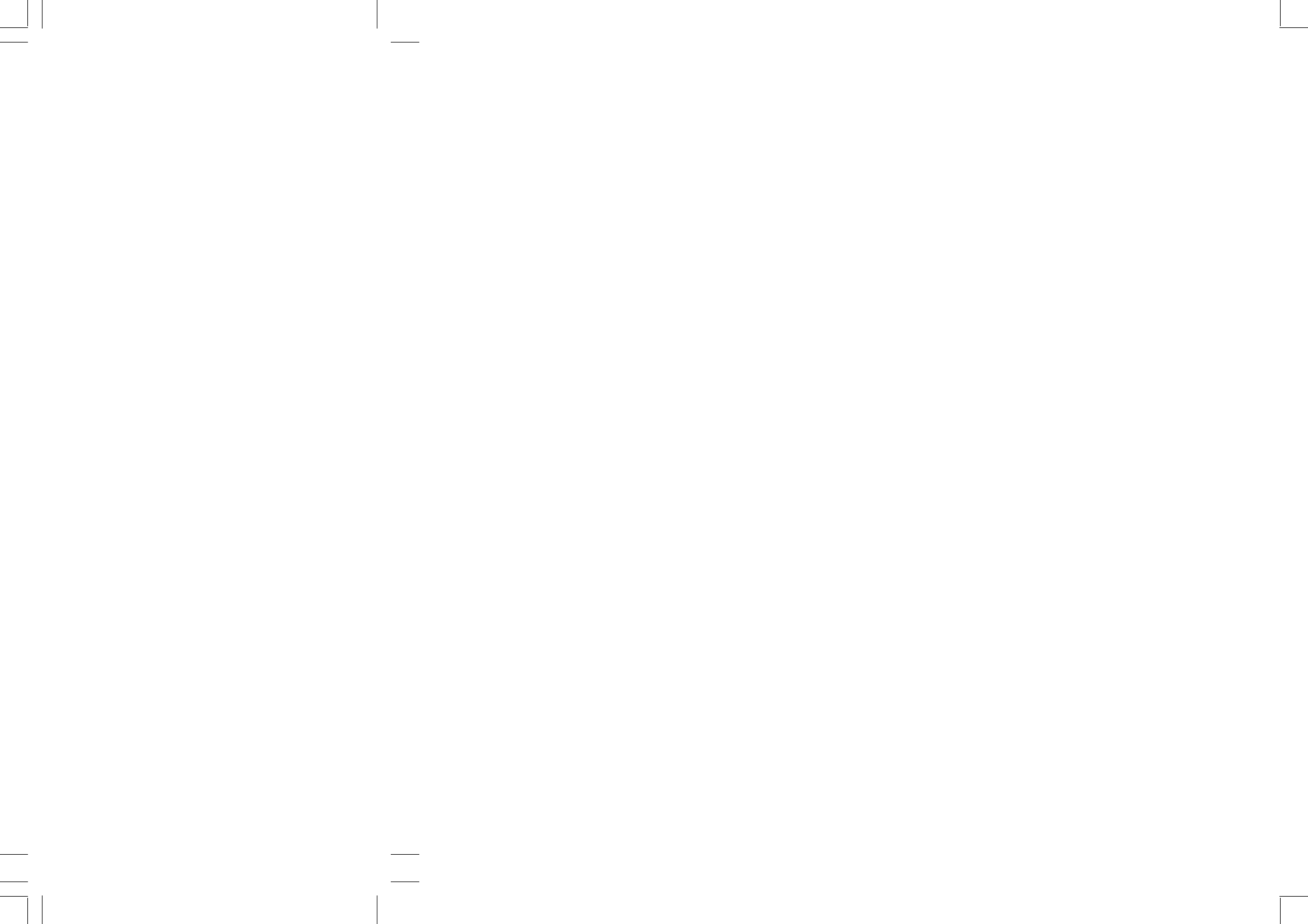
n>2</cn>

E(p)

[
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.]



$$\frac{S(p)}{E(p)} = \frac{3p^2 + 6p + 2}{p(p+1)(p+2)}$$







④ For more detailed information, see:
<http://mainline.essi.fr/wiki/bin/view/Fixide>

ixidea/WebHome