Simple readable slides (Ken’s rule of 1/20)

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This font is Arial 40 pt ≈ 1/20 slide height
This font is Arial 40 pt ≈ 1/20 slide height

I 1/25

Inline (km)

Time (s)
This font is Arial 32 pt ≈ 1/25 slide height
This font is Ariel 40 pt ≈ 1/20 slide height
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This font is Arial 40 pt ≈ 1/20 slide height
output

Inline (km)

1
1.2
1.4
4  6

Time (s)
input-output

Inline (km)

Time (s)

1
1.2
1.4

4 6

1 0 -1
Font size for slide

\[ w_g \equiv \text{width of graphic (points)} \]
\[ h_g \equiv \text{height of graphic (points)} \]
\[ w_g = 240 \text{ pt}, \quad h_g = 171 \text{ pt} \]
Font size for slide

\( w_g \equiv \text{width of graphic (points)} \)
\( h_g \equiv \text{height of graphic (points)} \)
\( w_f \equiv \text{fraction of slide width available} \)
\( h_f \equiv \text{fraction of slide height available} \)
\( w_f = 1.0, \quad h_f = 0.9 \)
Font size for slide

\[ w_g \equiv \text{width of graphic (points)} \]
\[ h_g \equiv \text{height of graphic (points)} \]
\[ w_f \equiv \text{fraction of slide width available} \]
\[ h_f \equiv \text{fraction of slide height available} \]
\[ w_a = 4 \times w_f \ (= \text{width available}) \]
\[ h_a = 3 \times h_f \ (= \text{height available}) \]
Font size for slide

\[ w_g \equiv \text{width of graphic (points)} \]
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\[ w_f \equiv \text{fraction of slide width available} \]
\[ h_f \equiv \text{fraction of slide height available} \]
\[ w_a = 4 \times w_f \text{ (= width available)} \]
\[ h_a = 3 \times h_f \text{ (= height available)} \]
\[ h_s = \min\left[(h_g/w_g)/(h_a/w_a), 1\right] \]
Font size for slide

\[ w_g \equiv \text{width of graphic (points)} \]
\[ h_g \equiv \text{height of graphic (points)} \]
\[ w_f \equiv \text{fraction of slide width available} \]
\[ h_f \equiv \text{fraction of slide height available} \]
\[ w_a = 4 \times w_f \quad (= \text{width available}) \]
\[ h_a = 3 \times h_f \quad (= \text{height available}) \]
\[ h_s = \min\left[\frac{h_g}{w_g}/\left(\frac{h_a}{w_a}\right), 1\right] \]

font size = \[ \frac{h_g}{h_f} / h_s / 20 \]
### Mines JTK PlotFrame

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>setFontSize(float size)</code></td>
<td>Sets the font size (in points) for all panels in this frame.</td>
</tr>
<tr>
<td><code>setFontSizeForPrint(double fontSize, double plotWidth)</code></td>
<td>Sets font size to automatically adjust for a printed manuscript.</td>
</tr>
<tr>
<td><code>setFontSizeForSlide(double fracWidth, double fracHeight)</code></td>
<td>Sets font size automatically for a slide in presentations.</td>
</tr>
</tbody>
</table>
Font size for slide

\[ w_g \equiv \text{width of graphic (points)} \]
\[ h_g \equiv \text{height of graphic (points)} \]
\[ w_f \equiv \text{fraction of slide width available} \]
\[ h_f \equiv \text{fraction of slide height available} \]
\[ w_a = 4 \times w_f \quad (= \text{width available}) \]
\[ h_a = 3 \times h_f \quad (= \text{height available}) \]
\[ h_s = \min[\left(\frac{h_g}{w_g}\right)/\left(\frac{h_a}{w_a}\right), 1] \]

\[ \text{font size} = \frac{h_g}{h_f} \frac{1}{h_s} / 20 \]

9.5 points
Font size for slide
Font size for slide
This font is Arial 40 pt ≈ 1/20 slide height
Font size for slide

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\[ w_a = 4 \times w_f \quad (= \text{width available}) \]
\[ h_a = 3 \times h_f \quad (= \text{height available}) \]
\[ h_s = \min\left[\frac{h_g}{w_g}/\left(\frac{h_a}{w_a}\right), 1\right] \]

font size = \frac{h_g}{h_f}/h_s/20
\( w_g \equiv \text{width of graphic (points)} \)
\( h_g \equiv \text{height of graphic (points)} \)
\( w_f \equiv \text{fraction of slide width available} \)
\( h_f \equiv \text{fraction of slide height available} \)
\[
\begin{align*}
  w_a &= 4 \times w_f \quad (= \text{width available}) \\
  h_a &= 3 \times h_f \quad (= \text{height available})
\end{align*}
\]
\( h_s = \min\left[\left(\frac{h_g}{w_g}\right) / \left(\frac{h_a}{w_a}\right), 1\right] \)
\[
\text{font size} = \frac{h_g}{h_f} / \frac{h_s}{20}
\]
\( w_g \equiv \text{width of graphic (points)} \)

\( h_g \equiv \text{height of graphic (points)} \)

\( w_f \equiv \text{fraction of slide width available} \)

\( h_f \equiv \text{fraction of slide height available} \)

\( w_a = 4 \times w_f \quad (= \text{width available}) \)

\( h_a = 3 \times h_f \quad (= \text{height available}) \)

\( h_s = \min\left[\frac{h_g}{w_g}, \frac{h_a}{w_a}\right] \)

\[
\text{font size} = \frac{h_g}{h_f} / h_s / 20
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Font size for slide

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\[ w_a = 4 \times w_f \ (= \text{width available}) \]
\[ h_a = 3 \times h_f \ (= \text{height available}) \]
\[ h_s = \min\left(\frac{h_g}{w_g}, \frac{h_a}{w_a}\right), 1 \]

**font size** = \[ \frac{h_g}{h_f} / h_s / 20 \]
A short equation (48 pt)

\[ q[i] = \frac{\sum_j p[j] s(i - j)}{\sum_j s(i - j)} \]
\[ q[i] = \frac{\sum_k \Lambda(p[i] - p_k) \sum_j p[j] \ r(p_k, p[j]) \ s(i, j)}{\sum_k \Lambda(p[i] - p_k) \sum_j r(p_k, p[j]) \ s(i, j)} \]
A short equation (96 pt)

\[
q[i] = \frac{\sum_j p[j] s(i-j)}{\sum_j s(i-j)}
\]
\[ q[i] = \frac{\sum_k \Lambda(p[i] - p_k) \sum_j p[j] r(p_k, p[j]) s(i, j)}{\sum_k \Lambda(p[i] - p_k) \sum_j r(p_k, p[j]) s(i, j)} \]
Summary

★ be consistent
Summary

★ be consistent

★ follow Ken’s rule of 1/20
Summary

★ be consistent
★ follow Ken’s rule of 1/20
★ do not use print font size
Summary

★ be consistent

★ follow Ken’s rule of 1/20

★ do not use print font size

★ do compute slide font size
Summary

★ be consistent

★ follow Ken’s rule of 1/20

★ do not use print font size

★ do compute slide font size

★ change one thing per slide
Summary

★ be consistent

★ follow Ken’s rule of 1/20

★ do not use print font size

★ do compute slide font size

★ change one thing per slide

★ avoid lots of slides like this one