AcroTEX.Net

Notes on formatting for a Windows Smart Phone[1]

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1. Introduction

The dimensions of the document are 4 inches wide and 8 inches high. The default font size is set to 12 point.

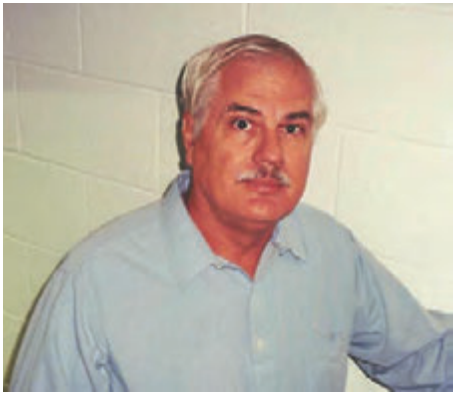
This layout was tested on my mobile device, a **Samsung Focus**, with a **Windows OS**. The display screen is 800 by 480 pixels (a 5:3 aspect ratio).

Below is a math equation to determine the quality of rendering of math.

$$\sin^2(x) + \cos^2(x) = 1$$

We also include a picture to test the quality here too.

[1] When viewing this PDF file on a desktop or laptop, you can go into Reading Mode by pressing Ctrl+H (Command+H, for Mac OS).



The goal is to maximize the experience of the user, that's you, when you *view* or *print* this document in **Adobe Reader** on a computer/laptop, and when you view this document on a smart phone (such as my **Samsung Focus**) or an **iPad**.

For the Desktop/Laptop. We list the major design points:

- The initial view of Adobe Reader is set to Two-Up Continuous (Facing) and Fit Width. When you view the PDF on a computer, you get a page of 8 inches wide and two columns. This format reads comfortably.
- The **Print** button at the top-left of each page prints the document with two digital pages per physical page. It prints out how the document looks when viewed (with 2Up).
- The **Toggle Cols** in the upper-left corner, toggles between a single column fit to the width of the window, and the two-column layout (fit to width also).

For the Smart Phone/iPad. When viewing the document in a smart phone or an **iPad**, the initial view is ignored; you get a single, continuous page. The width of the page and the font size make it

easy to read on a digital device. Links do not work in the app version of **Adobe Reader**, so the **Print** and **Toggle Cols** links do not work.

LaTeX Details. I used the new package named aeb_mobile, with the `smartphone`,

```
\usepackage[smartphone,
    useforms]{aeb_mobile}
```

The package is very simple, it uses the web and eforms packages. The web is used for the page layout, and eforms for the links, though hyperref provides links as well. aeb_mobile also inserts some document level JavaScript to define the actions of the two links **Print** and **Toggle Cols**.

After Distilling. I modified the **Mobile** setting of the **PDF Optimizer** dialog box; in the **Discard Objects** panel, I unchecked the item **Discard all JavaScript actions**, and in the **Discard User Data** panel, I unchecked **Discard external cross references**. After distilling, the file size is 71 KB and after **Optimized PDF** with my modified **Mobile** setting the file size is about 57 KB.[2]

Important: Though I have used **Adobe Distiller**, there is nothing in the aeb_mobile package that requires it. The document author may use pdflatex, for example, as the PDF creator.

Finally. I've added an `\AtEndDocument` event to generate an additional page if there is only an odd number of pages.

Now, back to my retirement. *dps*

[2] Actual file size may differ from the values stated as I add text to the document, such as this footnote.

Questions. How does this PDF view in your smart phone or **iPad**? Send me your comments, and suggested features. My email is dpstory@acrotex.net.