Online Appendix to "Is the iPad useful for sketch input? A comparison with the Tablet PC"

Scott MacLean, David Tausky, George Labahn, Edward Lank, Mirette Marzouk

Cheriton School of Computer Science, University of Waterloo

This document is an appendix to the paper:

MacLean S., Tausky D., Labahn G., Lank E., Marzouk M.: Is the iPad useful for sketch input? A comparison with the Tablet PC. *Sketch-based Interfaces and Modeling* 2011.

Below is a list of the expressions for which we collected transcriptions. Our corpus contains one transcription per participant of each expression in each of three configurations: Tablet PC, iPad with stylus, and iPad with finger.

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$D = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$a^x a^t = a^{x+t}$$

$$\frac{a^x}{a^t} = a^{x-t}$$

$$y = \ln x$$

$$e^{\ln x} = x$$

$$\ln(AB) = \ln A + \ln B$$

$$\ln A^p = p \ln A$$

$$x^3 + y^3 = (x + y)(x^2 - xy + y^2)$$

$$(x - h)^2 + (y - k)^2 = r^2$$

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$

$$A = \pi r^2$$

$$A = \frac{1}{2} r^2 \theta$$

$$V = \pi r^2 h$$

$$\sin\theta = \frac{y}{r}$$

$$\tan\theta = \frac{\sin\theta}{\cos\theta}$$

$$\int x^n dx = \frac{1}{n+1} x^{n+1}$$

$$\int a^x dx = \frac{1}{\ln a} a^x$$

$$\int \tan x \, dx = -\ln(\cos x)$$

$$f(x) = \frac{x^2 - 4}{x - 2}$$

$$\int_0^1 x^3 \, dx$$

$$\int_0^6 (x^2 + 1) \, dx$$

$$A = \frac{1}{\sqrt{2\pi}} \int_0^b e^{\frac{-x^2}{2}} \, dx$$

$$\int_{1.1}^{1.7} e^t \ln t \, dt$$

$$y = 3t^2 + \frac{12}{\sqrt{t}} - \frac{1}{t^2}$$

$$\lim_{x \to \infty} \frac{Ax^p}{e^{kx}} = 0$$

$$\int_1^4 \int_{\sqrt{y}}^{y} x^2 y^3 \, dx \, dy$$

$$3.14159$$

$$1.4142$$