Graphing Trigonometric Functions

 \mathbf{No} calculators should be used on this worksheet.

- 1: What is the domain and what is the range for sin(x) and cos(x)? Justify you answers based on the unit circle.
- **2:** Graph sin(x) and cos(x): be sure to label at least a dozen points on each curve.

3: Based on your graphs from problem 2, sketch: (a) $\sin(x/\pi)$ (b) $\cos(2x) - 4$

(c) $\cos(2x - 4)$

(d) $\sin^2(x)$

(e) $\tan(x)$

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