

Do your work on separate paper, organize it, and then show your work, here, but *organized* !!!

1. **2.5** Find the exact solution of the equation  $\sin(2x)\sin(x) - \cos(x) = 0$  in the interval  $[0, 2\pi)$ .

2. **2.5** Use a double-angle formula to rewrite  $10\sin^2(x) - 5$ .

3. **2.5** Rewrite the expression  $\sin^2(x)\cos^2(x)$  in terms of the first power of cosine.

4. **2.5** Find the exact values of sine, cosine and tangent for the given angles:

a.  $112^{\circ}30'$

b.  $\frac{\pi}{8}$

5. **2.5** Use the product-to-sum formula to write the product as a sum or difference:

a.  $\sin(3x)\cos(2x)$

b.  $\sin(5x)\sin(4x)$