7.3 Double Angle Formulas

"By the end of today's lesson:
I can derive and apply all double angle identities.
I can apply what I have learned in unfamiliar settings."

Recall: Compound Angle Identities

$\cos(A \pm B) =$

$\sin(A \pm B) =$

$\tan(A \pm B) =$

Use the compound angle for sine to develop the double angle identity for

$\sin 2A$

Use the compound angle for cosine to develop the double angle identity for

$\cos 2A$

Use the compound angle for tangent to develop the double angle identity for

$\tan 2A$

Ex. 1: If $\sin\theta = -\frac{2}{5}$ for $0 \le \theta \le 2\pi$ then find $\cos 2\theta$ and $\sin 2\theta$.

pp. 407-408 #1 to 5 , 9, 12, 16, 17
*the text has an incorrect answer for #3b: the right bracket should be before -1