

1. Find the exact values of $\sin(2u)$, $\cos(2u)$, and $\tan(2u)$ using the double-angle formulas. Given $\sin(u) = \frac{-3}{5}$ and $\frac{3\pi}{2} < u < 2\pi$. [Hint: Draw a triangle](5pt)

$$\sin(2u) = \underline{\hspace{2cm}}$$

$$\cos(2u) = \underline{\hspace{2cm}}$$

$$\tan(2u) = \underline{\hspace{2cm}}$$

2. Solve the triangle with the given information: $A = 42^\circ$, $a = 22$, & $b = 12$. Explain why there can be only one solution. (5pt)

$$B = \underline{\hspace{2cm}} \quad C = \underline{\hspace{2cm}} \quad c = \underline{\hspace{2cm}}$$

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