SHOW ALL WORK!!! Unsupported answers might not receive full credit. Furthermore, please give me EXACT answers, not decimals. You have 10 minutes to complete this quiz.

Problem 1 [5 pts] Given α in Quadrant IV such that $\sin \alpha = -\frac{3}{5}$ and β in Quadrant II such that $\cos \beta = -\frac{3}{4}$, compute $\cos(\alpha + \beta)$.

Problem 2 [5 pts] Given $\cos \alpha = \frac{5}{13}$, $\frac{3\pi}{2} < \alpha < 2\pi$, find $\cos \frac{\alpha}{2}$.