Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. A helicopter takes off from platform A and travels (directly) towards platform B. While at a height of 700 meters, the pilot measures the angle of depression to platform A and that to platform B and finds that they are $43°$ and $27°$, respectively. Find the distance between the two platforms.

2. Suppose that $\tan\theta = -\frac{7}{2}$ and that $\sin\theta < 0$. Find the exact value of $\cos\theta$ and $\csc\theta$.