Integration by Parts

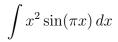
While working in a group make sure you:

- Expect to make mistakes but be sure to reflect/learn from them!
- Are civil and are aware of your impact on others.
- Assume and engage with the strongest argument while assuming best intent.

1. Find:

 $\int x \cos(x) \, dx$

 $\int (3x+1)\sec^2(x)\,dx$



2. Find: $\int_{1}^{2} \frac{\ln(y)}{\sqrt{y}} \, dy$

$$\int_{\sqrt{\frac{\pi}{2}}}^{\sqrt{\pi}} \theta^3 \cos(\theta^2) \, d\theta$$

$$\int_0^1 5^t \sin(5^t) \, dt$$