

Quiz 1 ————— Math 1272

Find the following integrals. **SHOW WORK!**

(1)
$$\int_0^{\frac{\pi}{2}} \cos^3(x) \sqrt{\sin(x)} \, dx$$

(2)
$$\int x^2 \sin(3x) \, dx$$

$$(3) \quad \int \sec^3(2x) \tan(2x) \, dx$$

$$(4) \quad \int x^{3/2} \ln(x) \, dx$$