

1. Reverse the order of integration in the following expression:

$$\int_{-4}^0 \int_0^{8+2x} Q \, dy \, dx + \int_0^4 \int_0^{8-2x} Q \, dy \, dx$$

where  $Q$  is an unknown function of  $x$  and  $y$ .

*Do not evaluate the integral (yet).*

2. Choose a function  $Q$ . Evaluate both the original expression and your reversed version. Do you get the same answer?

*If both integrals are too hard, start over. If one integral is doable, but the other is not, say so — and consider starting over but turning in both examples.*