9. [8 pts] Two rectangular boxes are mathematically similar. The surface area of one is 15.2 square meters while that of the other is 237.5 square meters. If the volume of the smaller one is 100 cubic meters, what is the volume of the larger? Show work, but you need not explain. Round to the nearest tenth.

\[
\text{new area} = (s.f.)^2 \cdot \text{old area}
\]
\[
237.5 = (s.f.)^2 \cdot 15.2
\]
\[
15.625 = (s.f.)^2
\]
\[
3.9 = (s.f.)
\]
\[
\text{new vol} = (3.9)^3 \cdot 100 = 5931.9 \text{ m}^3
\]

10. (a) [8 pts] Translate the "F" via the arrow, then rotate the result 90° clockwise around point O. Circle your final answer.

(b) [10 pts] Reflect the "F" through line \( \ell \), then rotate the result 180° around point Q. Circle your final answer.