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## Physics Homework \# 3-14: Momentum.

1. Two objects, $A \& B$, have identical velocities. Object $A$ has 3 times the mass of object B. Compare the momentum of each object. Justify your answer.
2. Two other objects, $C$ and $D$, have identical masses. Object $C$ has twice the velocity of object D. Compare the momentum of each object. Justify your answer.
3. An astronaut whose mass is 80 kg carries an empty oxygen tank with a mass of 10 kg . He throws the tank away from himself with a speed of $2.0 \mathrm{~m} / \mathrm{s}$. With what velocity does he start to move off into space?
