

## Momentum questions just using $mv$

1. A football with a mass of 0.45 kg is kicked at 10 m/s. Calculate its momentum.
2. A bicycle and rider have a total mass of 80 kg and travel at 5 m/s. Calculate their momentum.
3. A shopping trolley has a mass of 25 kg and moves at 2.5 m/s. Calculate its momentum.
4. A motorbike has a mass of 200 kg and travels at 12 m/s. Calculate its momentum.
5. A rowing boat with a mass of 300 kg moves along a river at 4 m/s. Calculate its momentum.
6. A London taxi has a mass of 1800 kg and travels at 15 m/s. Calculate its momentum.
7. A train carriage has a mass of 25 000 kg and moves at 20 m/s. Calculate its momentum.
8. A racing car has a momentum of 18 000 kg m/s and a mass of 900 kg. Calculate its velocity.
9. A van travelling at 25 m/s has a momentum of 50 000 kg m/s. Calculate its mass.
10. A lorry has a mass of 12 000 kg and a momentum of 180 000 kg m/s. Calculate its velocity.