

Vehicle weights

This task is about solving mathematical problems involving weight.



A car-transporter is allowed to carry no more than 8 vehicles, up to a maximum total weight of 8 tonnes. A small car weighs 800 kg and a station-wagon weighs 1200 kg. (1 tonne = 1000 kg)

a) Which **three** of these loads would **not** be allowed? *Select three options.*

<input type="radio"/> 4 station-wagons and 3 small cars	<input type="radio"/> 7 station-wagons	<input type="radio"/> 9 small cars
<input type="radio"/> 3 station-wagons and 5 small cars	<input type="radio"/> 5 station-wagons and 3 small cars	

Here is an equation to describe the load of the transporter: $(800 \times m) + (1200 \times n) = p$

i) What does the m stand for?

ii) What does the p stand for?

c) If 2 station-wagons are put on the transporter, what is the largest number of *small cars* that can be loaded?

small cars [Remember the 8 vehicle maximum and the weight limit of 8 tonnes.]

Show how you worked out your answer in the space below: