

# stopping distances

Do you realise how long it takes a car travelling towards you to stop? Remember this when you get off the school bus and are trying to cross the road.

**Reaction distance** – is the distance a vehicle continues to travel while the driver thinks about and processes the information needed to stop the vehicle.

**Braking distance** – the distance the vehicle continues to travel once the brakes are applied

**Stopping distance** – the total distance a vehicle travels to come to a complete stop from the time the driver first decides to stop, including the reaction distance and the braking distance.

**If James runs onto the road 45m in front of a car...  
will the car stop in time?**

	Reaction	Braking	Stopping distance	Did the car stop in time?
At 40 km/h	11m	9m		
At 50 km/h	21m	14m		
At 60 km/h	25m	20m		
At 70 km/h	28m	29m		
At 80 km/h	34m	35m		
At 90 km/h	18m	43m		
At 100 km/h	20m	56m		
At 110 km/h	22m	68m		



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## Solutions

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If James runs onto the road 45m in front of a car...  
will the car stop in time?

	Reaction	Braking	Stopping distance	Did the car stop in time?
At 40 km/h	11m	9m	20	YES
At 50 km/h	21m	14m	35	YES
At 60 km/h	25m	20m	45	TOUCH
At 70 km/h	28m	29m	57	NO
At 80 km/h	34m	35m	69	NO
At 90 km/h	18m	43m	61	NO
At 100 km/h	20m	56m	76	NO
At 110 km/h	22m	68m	90	NO

