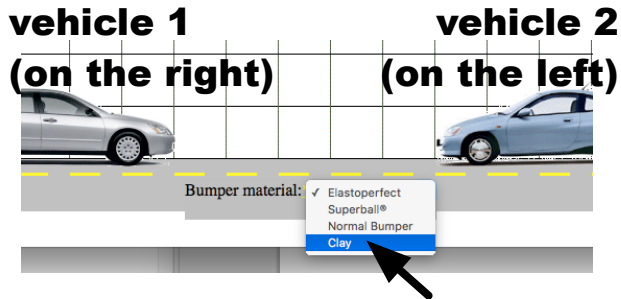


Wk30 Momentum

1 Simulation

name: _____



Set the masses and velocities and see which way the crash goes afterward.

Choose Clay!

Situation 1

	VEHICLE 1	VEHICLE 2	
MOMENTUM	2000 kg	1000 kg	MOMENTUM
	3 m/s	-2 m/s	

AFTERWARDS: go left go right stop

Situation 3

	VEHICLE 1	VEHICLE 2	
MOMENTUM	1000 kg	1000 kg	MOMENTUM
	4 m/s	-3 m/s	

AFTERWARDS: go left go right stop

Situation 2

	VEHICLE 1	VEHICLE 2	
MOMENTUM	500 kg	1000 kg	MOMENTUM
	4 m/s	-2 m/s	

AFTERWARDS: go left go right stop

Situation 4

	VEHICLE 1	VEHICLE 2	
MOMENTUM	2000 kg	500 kg	MOMENTUM
	1 m/s	-6 m/s	

AFTERWARDS: go left go right stop

After you've finished, go back and calculate the momentum of both vehicles. How could you have predicted which way they would go?

In each situation fill in a missing mass and/or velocity to make it go the way indicated.

Situation 5

	VEHICLE 1	VEHICLE 2	
MOMENTUM	1000 kg	2000 kg	MOMENTUM
	2 m/s		

AFTERWARDS: go left go right stop

Situation 8

	VEHICLE 1	VEHICLE 2	
MOMENTUM	1000 kg	2000 kg	MOMENTUM
		-3 m/s	

AFTERWARDS: go left go right stop

Situation 6

	VEHICLE 1	VEHICLE 2	
MOMENTUM	1000 kg	2000 kg	MOMENTUM
	2 m/s		

AFTERWARDS: go left go right stop

Situation 9

	VEHICLE 1	VEHICLE 2	
MOMENTUM	500 kg	800 kg	MOMENTUM
	2 m/s		

AFTERWARDS: go left go right stop

Situation 7

	VEHICLE 1	VEHICLE 2	
MOMENTUM	1000 kg	2000 kg	MOMENTUM
	2 m/s		

AFTERWARDS: go left go right stop

Situation 10

	VEHICLE 1	VEHICLE 2	
MOMENTUM	800 kg	600 kg	MOMENTUM
	2 m/s		

AFTERWARDS: go left go right stop