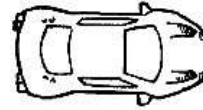NAME _____ DATE _____

Scenario

Angela is in a stopped car at a traffic light when the light turns green and she accelerates.

Using Representations

PART A: Sketch and label vectors for velocity, acceleration, and net force on the car. (This is NOT a free-body diagram.)

Which way does Angela's body "feel" pushed? Explain in a short sentence why she feels this way.
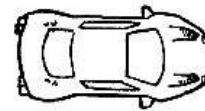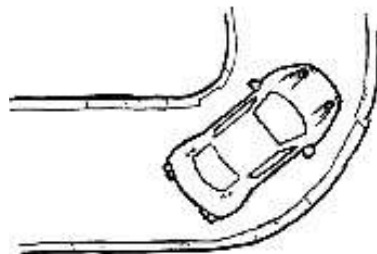
She feels pushed _____ because _____

_____

_____

_____

PART B: As she approaches a stop sign, she slams on the brakes. Sketch and label vectors for velocity, acceleration, and net force on the car. (This is NOT a free-body diagram.)

Which way does Angela's body "feel" pushed? _____

Which way is the car accelerating? _____

Which direction is the net force on the car? _____

PART C: As Angela continues driving, she rounds a corner at a constant speed. Sketch and label vectors for velocity, acceleration, and net force on the car. (This is NOT a free-body diagram.)

Which way does Angela's body "feel" pushed? _____

Which way is the car accelerating? _____

Which direction is the net force on the car? _____