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### Task #1

You pedal your 75-kg bike with a force of 423 Newtons. You accelerate at a rate of  $1.8 \text{ m/s}^2$ . What is the force of friction? Ignore Air Resistance

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### Task #2

Before opening her parachute, a 57-kg skydiver experiences 457 N of air drag. What is the magnitude of her downward acceleration?



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### Task #3

A piano is lifted by a crane with a force of 12,500 N. It accelerates at a rate of  $1.3 \text{ m/s}^2$ . What is the mass of the piano?

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