

VECTOR RESULTANTS

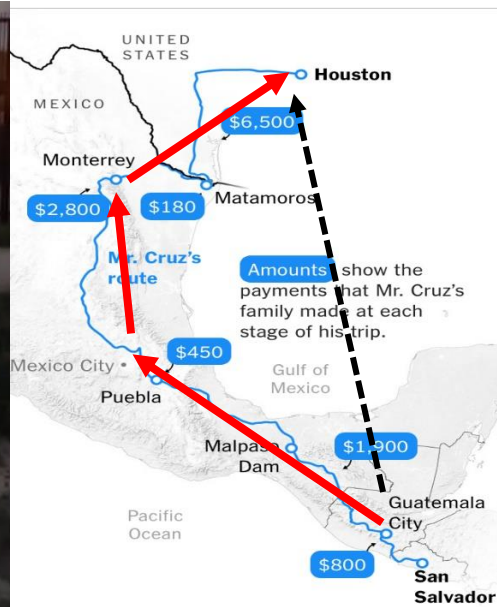
Unit 2, Dr. John P. Cise,

Professor of Physics, Austin Com. College, Austin, Texas, USA jpcise@austincc.edu & NYTimes June 30, 2018 by Nicholas Kulish

What It Costs to Be Smuggled Across the U.S. Border

Bribes and shakedowns. Days in hideaways without food. For many fleeing violence in Central America, this is what thousands of dollars gets them on the journey to the United States.

By NICHOLAS KULISH JUNE 30, 2018



INTRODUCTION

This APPLICATION will have you practice adding vectors. Guatemala to Mexico City is 600 miles at 45° above west. Mexico City to Monterrey is 400 miles 80° above westerly direction. Monterrey to Houston is 400 miles at 40° above easterly direction.

QUESTION: Find magnitude and direction of Resultant vector displacement Guatemala to Houston? Thus, find magnitude & direction. Show all calculations

ANSWER: $R(\text{magnitude}) = \sim 1091$ miles @ $\sim 80^\circ$ North of west.

COMMENT: Total Smuggle cost $\sim \$13,000$