VECTOR RESULTANTS Unit 2 Dr. John P. Cise, Professor of Physics, Austin

Com. College, Austin, Texas USA, jpcise@austincc.edu & New York Times, August 10, 2018 by Neil MacFarquhar

ARAL SEA DISPATCH

How a Disappearing Sea Became a Town's Main Attraction



INTRODUCTION: Goal for this application is to find resultant vector R(black in graphic at left). Given: Vector A(RED) is 600 miles 30° south of east, Vector B(blue) is 600 miles 45° West of north.

QUESTION: (a) Set up a grid and find components of vectors A & B? Show your work. (b) Find resultant(magnitude & direction) vector R?

ANSWER: (a) Show your grid and all solution work on paper. (b) R magnitude = ~157 mi. at 37[°] west of south.

MUYNAK, Uzbekistan — The fierce windstorm that walloped this small defunct port in late spring stunned even a local ecologist long resigned to the devastation wrought by the disappearance of the once ample Aral Sea.

A thick, stinging haze greeted the ecologist, Gileyboi Zhyemuratov, as he stepped outside that day in May. "When you opened the door, everything was white like snow," said Mr. Zhyemuratov, 57, a descendant of generations of fishermen in a place where there are no longer any fish.



Fishing at the Sudochye Lake, which was once part of the Aral Sea in Uzbekistan.

For three days, the tempest hurled silt off the former seabed of what was once the planet's fourth-largest inland body of water. It blotted out the sky and left the residents of the former port, Muynak, in western Uzbekistan, chewing salty grit. Even the rain turned brackish, sending panicked farmers scrambling to rescue crops.

As the storm blew in, Vladimir Zuev, a retired Russian pilot turned tour operator, was sitting beneath his shady pergola, where the garden gnomes consist of a bust of Lenin and other Soviet icons.



Tourists on stranded, rusted ships in Muynak.