

Day 11

Use Vectors and Pythagorean theorem $a^2 + b^2 = c^2$ to find the resultant vector.

a) An eagle flies East at a speed of 15 mph. The wind is blowing from the North at 10 mph. What is the actual ground speed of the eagle?

b) A plane is flying North at a speed of 400 mph. The wind is blowing from the West at 100 mph. What is the actual ground speed of the plane?

c) A crow is flying South at 12 mph. The wind is blowing from the South at 10 mph. What is the actual ground speed of the crow?