Physics Test Review

Vectors and Projectile motion

Concepts: **Be able to read a position/time and a velocity/time graph. What is the motion of an object at any point on the graph?**

What is the shape of a projectiles path?

What is the difference between a projectile and a non-projectile?

What angle causes the projectile to go the farthest horizontally?

Vertically? Stay in the air the longest?

When do vectors add the same as scalars?

What influences the horizontal motion of a projectile? Vertical?

How is a satellite a projectile?

What quantities are vectors? Scalars?

Problems: Vectors

- Adding Vectors at right angles.

Add the following vectors together stating the final vector as a magnitude and general direction.

- Vector A is 10 miles North
- Vector B is 15 miles West
- Vector C is 30 miles South
- Vector D is 7 miles North
- Vector E is 5 miles West

A + B + C + D + E = F

Vector F = _____ miles _____

- Adding Vectors graphically

- Vector A is 3 cm @ 140 degrees
- Vector B is 4 cm @ 30 degrees
- Vector C is 5 cm @ 250 degrees
- Vector D is 7 cm @ 300 degrees

A + B + C + D = E

Vector E = _____ @ _____