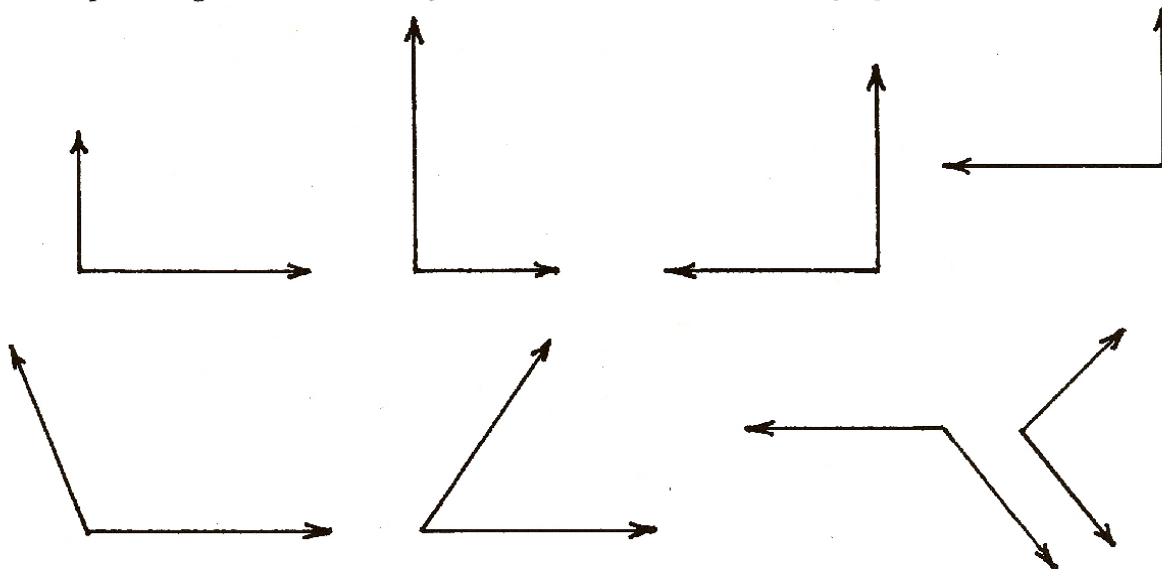


**Concept-Development  
Practice Page**

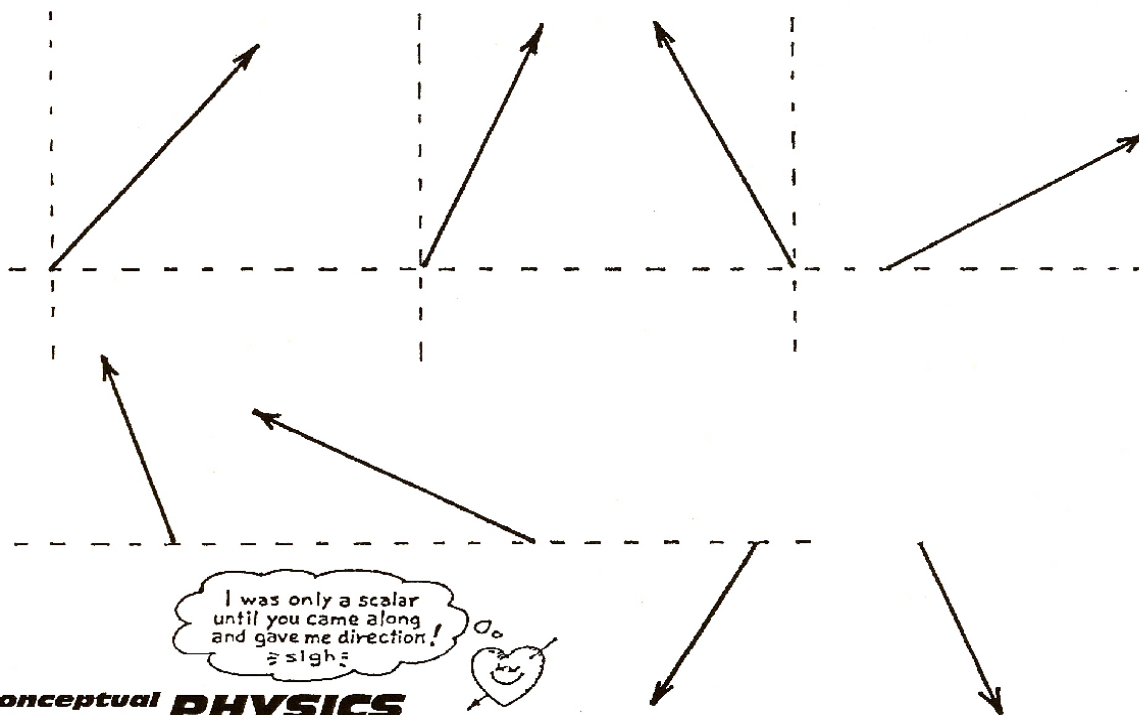
**3-2**

*Vectors*

Use the parallelogram rule to carefully construct the resultants for the eight pairs of vectors.



Carefully construct the vertical and horizontal components of the eight vectors.



**Conceptual PHYSICS**

### Tossed Ball

A ball tossed upward has initial velocity components 30 m/s vertical, and 5 m/s horizontal. The position of the ball is shown at 1-second intervals. Air resistance is negligible, and  $g = 10 \text{ m/s}^2$ . Fill in the boxes, writing in the values of velocity *components* ascending, and your calculated *resultant velocities* descending.

