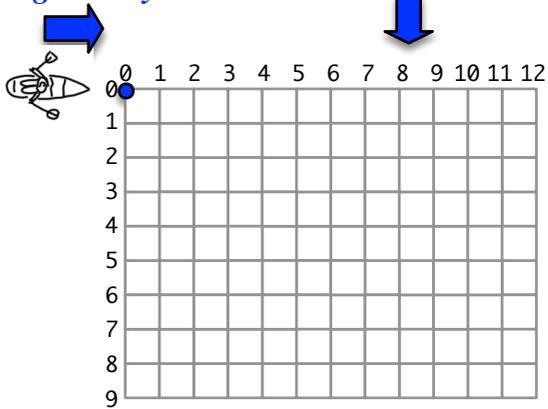


Week 20 2D Motion

3. V_x and V_y (A)

Name: _____

rowing velocity = 4 m/s current velocity = 2 m/s



First solve for the time it takes the boat to cross 12 m

$$(D_x) = (V_x)(t)$$

Then solve for how far down the current carries the boat

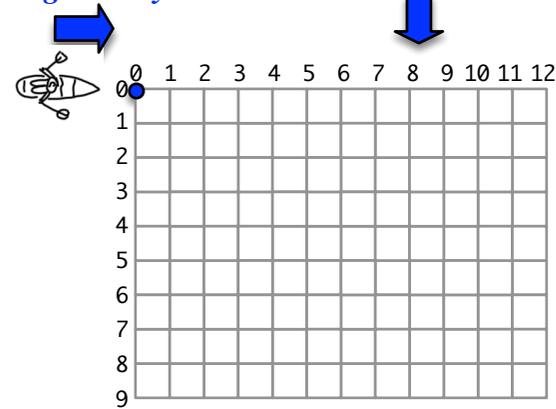
$$(D_y) = (V_y)(t)$$

Week 20 2D Motion

3. V_x and V_y (B)

Name: _____

rowing velocity = 2 m/s current velocity = 1 m/s



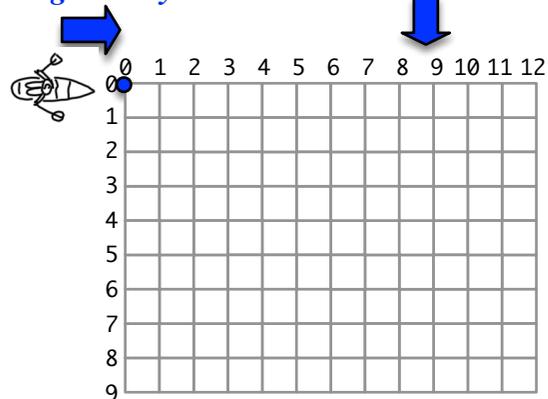
First solve for the time it takes the boat to cross 12 m

$$(D_x) = (V_x)(t)$$

Then solve for how far down the current carries the boat

$$(D_y) = (V_y)(t)$$

rowing velocity = 3 m/s current velocity = 2 m/s



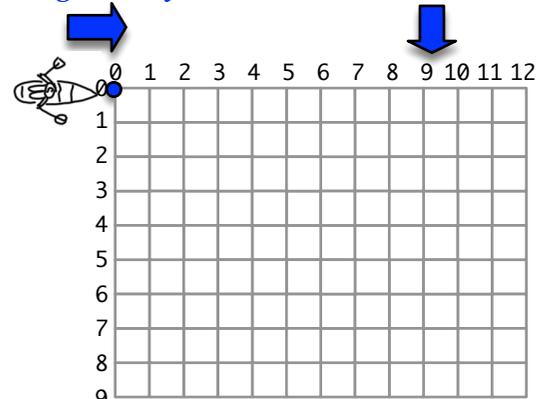
First solve for the time it takes the boat to cross 12 m

$$(D_x) = (V_x)(t)$$

Then solve for how far down the current carries the boat

$$(D_y) = (V_y)(t)$$

rowing velocity = 4 m/s current velocity = 3 m/s



First solve for the time it takes the boat to cross 12 m

$$(D_x) = (V_x)(t)$$

Then solve for how far down the current carries the boat

$$(D_y) = (V_y)(t)$$

Airplane A will fly 100 miles East in 2 hrs. The other airplanes experience wind in the directions shown.

Airplane A will fly 100 miles East in 2 hrs. The other airplanes experience wind in the directions shown.

