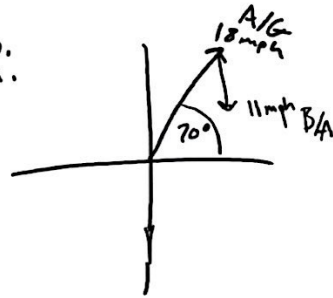P: How far did boat B move.

Alex Rodriguez
Isaac Abella
Jimmy Millmore
Yage Ango

R:

O:

V: mph

$$V_{B/G} = V_{B/A} + V_{A/G}$$

$$V = \frac{\Delta S}{\Delta t}$$
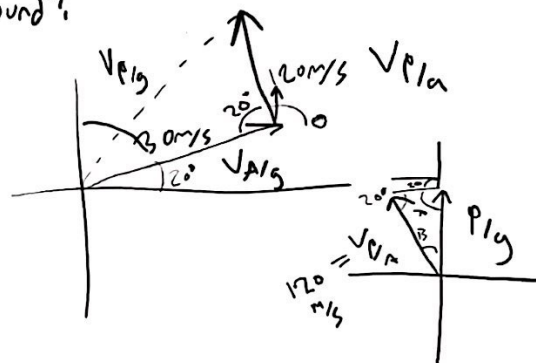
$$\Delta S = V \Delta t$$

$$\boxed{\Delta S_b = (V_{B/A} + V_{A/G}) \Delta t}$$

	Mag	Dir	X	y
$V_{B/G}$	?	?		
$V_{A/G}$	18 mph	↗	$+18mph \cdot \sin(\omega)$	$+18mph \cdot \cos\omega$
$V_{B/A}$	11 mph	↓	0	$-11mph$

P: What direction should the airplane head so that is flying north with respect to the ground?

R:

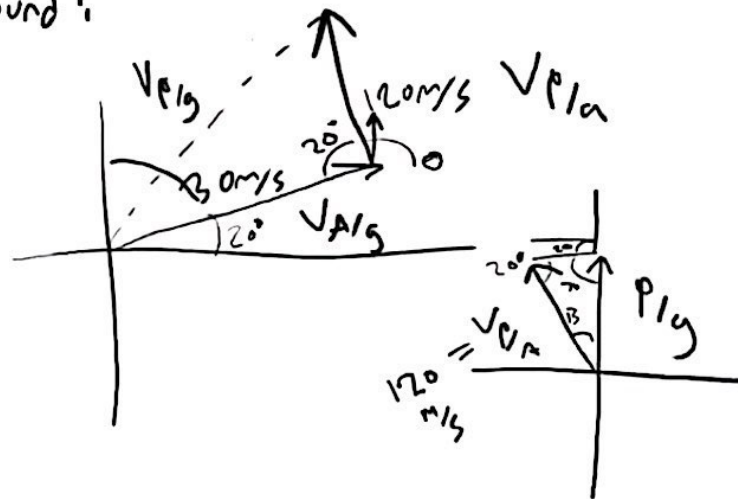$V_{P/g}$ 120 m/s $V_{P/a}$

13 m/s

$V_{A/g}$

$V_{a/a}$ = 120 m/s $P_{/g}$

Maa. ~~D~~ ~~X~~ ~~Y~~

P: What direction should the airplane head so that is flying north with respect to the ground?

R:

$V_{P/g}$ $V_{P/a}$

20 m/s $V_{P/a}$

30 m/s

20° $V_{A/g}$

120 m/s $V_{a/P}$ P/g

	Mag.	Dir	X	Y
$V_{P/g}$	?	↑		
$V_{A/g}$	120 m/s	?		
$V_{P/A}$	30 m/s	20° ↗	$30\cos(20°)$	$30\sin(20°)$

$$V_{P/g} = V_{P/a} + V_{A/g}$$

law of sines:

$$\frac{\sin a}{A} = \frac{\sin(B)}{B} = \frac{\sin(\xi)}{C}$$

30 m/s. 20° ↗ 30cos(20) 30 sine(20)

$$V_{P/g} = V_{P/a} + V_{A/g}.$$

law of sines:

$$\frac{\sin a}{A} = \frac{\sin(B)}{B} = \frac{\sin(\xi)}{C}$$

P: What is the wind velocity?

R:

	Mag	Dir	X	Y
	230 mph	↖	-230	