

- Write an equation for a wave with these properties (and complete the table!):

Group #	Moves to the ...	Has period (s)	Has $\lambda$ (m)	Velocity  (m/s)	Amplitude (units?)	Phase constant (rad)
1	right	3	?	1	1	$-\pi/4$
2	left	1	3	?	2	$\pi/2$
3	right	2	?	3	3	$-\pi/2$
4	left	?	2	3	4	0
5	right	1	3	?	5	$\pi/2$
6	left	2	?	1	4	$-\pi/4$
7	right	?	1	2	3	$\pi/4$
8	left	3	2	?	2	$\pi$
9	right	?	3	2	1	0
10	left	2	?	1	2	0

- Sketch a plot your wave at  $t = 0$