In exercises 6 and 7, find the pivot element.
DO NOT PIVOT!

8pts

(6) 8pt

x	y	u	v	P	
2	3	1	0	0	2
-2	1	0	1	0	-4
-3	-4	0	0	1	0

8pts

(7) 8pt

x	y	u	v	P	
0	**4**	1	1	0	8
1	$-1/2$	0	$-1/2$	0	2
0	$-11/2$	0	$-3/2$	1	6

10pts

(8) Go through one complete pivot step for #6 above. State the basic solution (after pivoting!). Is it the optimal solution? Why or why not?

$\frac{1}{2}R_1 \longrightarrow$

x	y	u	v	P	
1	$3/2$	$1/2$	0	0	1
-2	1	0	1	0	-4
-3	-4	0	0	1	0

R_2+2R_1
$R_3+3R_1 \longrightarrow$

x	y	u	v	P	
1	$3/2$	$1/2$	0	0	1
0	4	1	1	0	-2
0	$1/2$	$3/2$	0	1	3

3pts for pivoting

Basic Soln:

$y=0$ $x=1$
$u=0$ $v=-2$
$P=3$

5pts

not optimal (2pt)
b/c -2 is in rt colm!