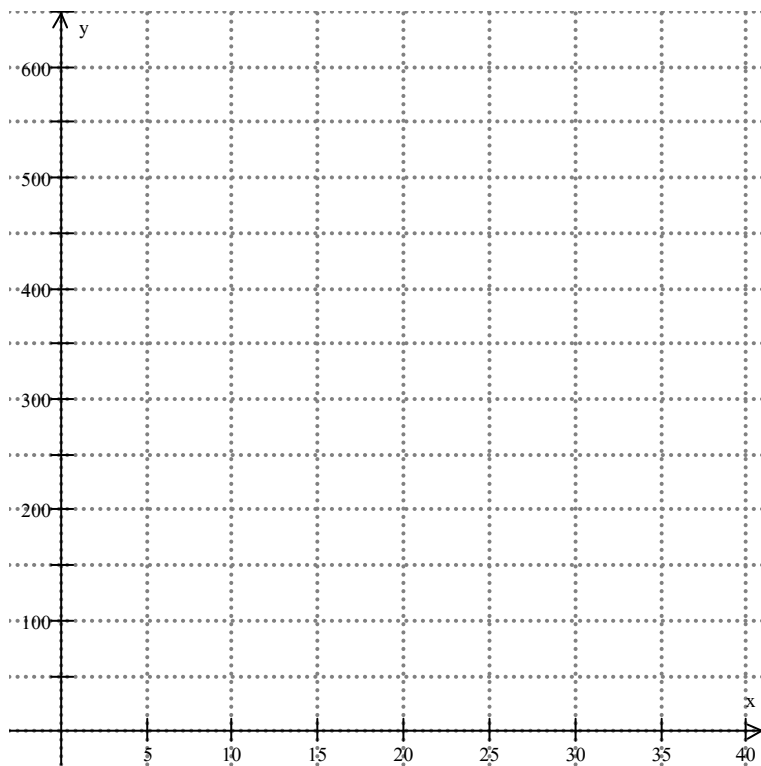


Rich Problem: Choose a Wage Type

You have just started a new job and have been given the following options for your weekly wage. Option 1 is an hourly rate of \$10/hr with a weekly salary of \$150. Option 2 is an hourly rate of \$15/hr with a weekly salary of \$50.

Make a System of Linear Equations to represent your wage options.
Explain which option would be better depending on how many hours you work.
(Please use a graph in your explanation)



Rich Problem: Choose a Wage Type (SOLUTION)

Declare variables:

w = weekly wage

h = hours worked in a week

Equations:

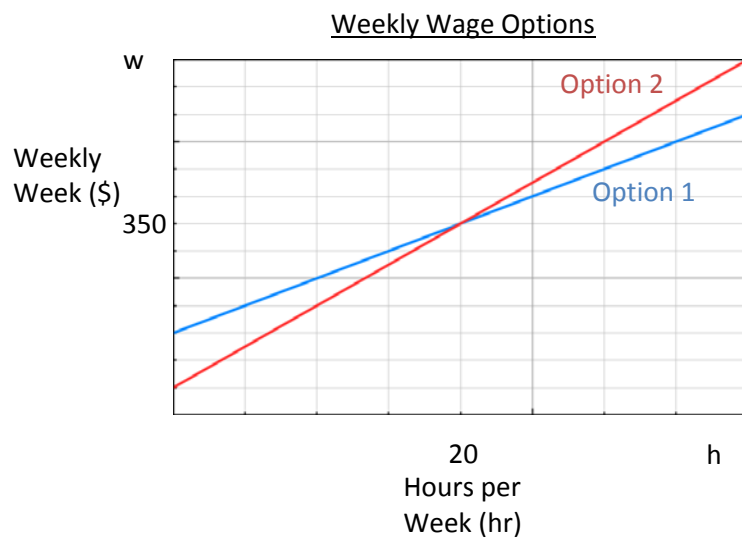
Option 1: $w = 10h + 150$

Option 2: $w = 15h + 50$

Which Option is Better?

Analyze with a Graph / Table of Values

h	w (Option 1)	w (Option 2)
0	\$150	\$50
10	\$250	\$200
20	\$350	\$350
30	\$450	\$500
40	\$550	\$650



Both options make the same amount if you work 20 hours. If you work less than 20 hours a week you should choose Option 1 but if you work more than 20 hours a week you should choose Option 2.