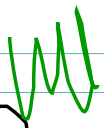


\$67 #10  ~~$F = P(1 + \frac{r}{n})^{nt}$~~

Which of the two rates would yield the larger amount in one year?

11% semiannually

$$F = (\text{solve})$$

$$P = 1$$

$$r = 11\% = 11(0.01) = 0.11$$

$$n = 2$$

$$t = 1$$

$$F = 1 \left(1 + \frac{0.11}{2} \right)^{2 \cdot 1}$$

1.113025

10.6% daily

$$F = (\text{solve})$$

$$P = 1$$

$$r = 10.6\% = 10.6(0.01) = 0.106$$

$$n = 365$$

$$t = 1$$

$$F = 1 \left(1 + \frac{0.106}{365} \right)^{365 \cdot 1}$$

1.111804767

1.113025 (left)

1.111804767 (right)

1.1.302512

1.111804767...P

\$6.7 #10

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1.11302512

1.111804767... P

8.7 System of Inequalities

4/8/19 pg. 132-133

19. Graph inequalities

$$\begin{cases} 3x + 5y \leq 15 & (1) \\ 5x - 3y \leq 0 & (2) \end{cases}$$

* To graph an inequality
step 1.) solve for y if possible, if not, solve for x

$$(1) \quad 3x + 5y \leq 15$$

$$5y \leq -3x + 15$$

Slope intercept form


$$\frac{5y}{5} \leq \frac{-3x + 15}{5}$$

$$y \leq -\frac{3x}{5} + \frac{15}{5}$$

$$y \leq -\frac{3}{5}x + 3$$

Step 3.) Shade

$$y \leq$$


 y = up or down

Step 2.) Draw a solid or dashed line

solid line $\leq \geq$

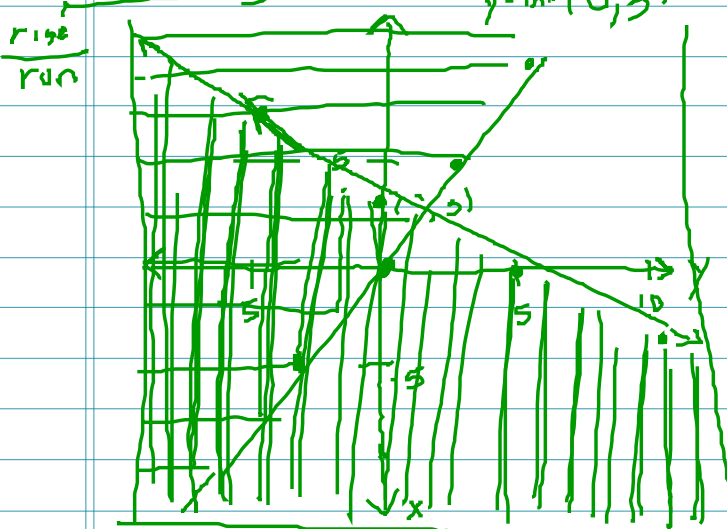
dashed $< >$

$y \leq$ solid line

* put equal sign (pretend it says equals)

$$y = -\frac{3}{5}x + 3$$

y-int (0, 3)



$$(2) \quad 5x - 3y \leq 0$$

Step 1.) solve for y

$$5x - 3y \leq 0$$

$$-5x \quad -5x$$

$$-3y \leq -5x$$

$$y \geq \frac{5}{3}x + 0$$

Step 2.) pretend to draw

$$y \geq$$

$$y = \frac{5}{3}x + 0$$

rise
run

0, 0

Step 3.) Shade

$y \geq$ shade up

29.
$$\begin{cases} x \geq 0 \\ y \geq 0 \\ x+y \geq 2 \\ x+2y \leq 10 \\ 2x+y \leq 10 \end{cases}$$
 } Quid I



$$\begin{aligned} x+y &\geq 2 \\ y &\geq -x+2 \\ y &\geq -1x+2 \\ y &\geq -\frac{1}{1}x+2 \\ &\uparrow \\ &\text{solid up} \end{aligned}$$

$$\begin{aligned} x+2y &\leq 10 \\ 2y &\leq -x+10 \\ \frac{2y}{2} &\leq \frac{-x+10}{2} \\ y &\leq -\frac{1}{2}x + \frac{10}{2} \\ y &\leq -\frac{1}{2}x + 5 \\ &\uparrow \\ &\text{solid down} \end{aligned}$$

$$\begin{aligned} 2x+y &\leq 10 \\ -2x &\leq -y+10 \\ y &\leq -2x+10 \\ &\uparrow \\ &\text{solid down} \end{aligned}$$