

Pick Up the
New Recording
Sheet .

You are about to do a 4-question
Pre Learning Check on Equation Solving.

Although I don't expect you to do wonderful at this point, I do expect you to make at least some progress because you have already started a progression in Algebra 1.

Do as much as you can in 10 minutes. Then I will ask you to turn it in.

for a small grade for just attempting, not based on correct answers.

WARM UP

Your Ch. 2 TEST was not included in progress reports. It will be returned to you tomorrow.

Someone started solving the system of equations below using the "classic" substitution method. Continue their work until you have the solution $(a = b = ?)$.

$$5a - 3b = 11$$

$$+3b \quad +3b$$

$$5a = 11 + 3b$$

$$a = \frac{11}{5} + \frac{3b}{5}$$

$$10a + b = 30$$

$$10\left(\frac{11}{5} + \frac{3b}{5}\right) + b = 30$$

$$20 \cdot \frac{11}{5} + 20 \cdot \frac{3b}{5} + b = 30$$

$$22 + 6b + b = 30$$

$$22 + 7b = 30$$

$$7b = 8$$

$$b = \frac{8}{7}$$

$$10a + \frac{8}{7} = 30$$

$$70a + 8 = 210$$

$$70a = 202$$

$$a = \frac{202}{70}$$

$$a = \frac{101}{35}$$

Now turn your paper over.

2] Ok, now solve the same system using the "classic" elimination method. Continue what was started.

$$\begin{array}{r} 5a - 3b = 11 \\ 10a + b = 30 \end{array} \quad \begin{array}{l} \xrightarrow{1} \\ \xrightarrow{3} \end{array} \quad \begin{array}{r} 5a - 3b = 11 \\ \underline{30a + 3b = 90} \end{array}$$

$$35a = 101$$

$$a = \frac{101}{35}$$

$$\cancel{5} \left(\frac{101}{35} \right) - 3b = 11$$

$$\frac{101}{7} - 3b = 11$$

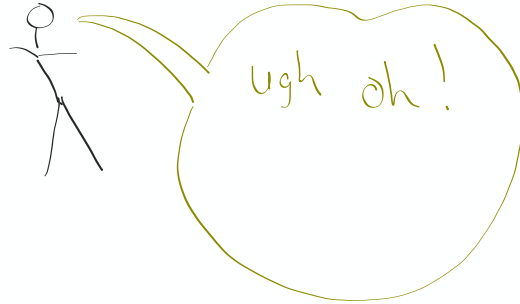
$$\begin{array}{r} 101 - 21b = 77 \\ \underline{-101} \end{array}$$

$$-21b = -24$$

$$b = \frac{-24}{-21}$$

$$b = \frac{8}{7}$$

Now Go To your notes
and solve the following
system and mean Mr. Cedarlund
gets to choose your method.



Solve the linear system by substitution

$$2x + 5y = 1 \quad 3x - 7y = 2$$



You must substitution
and you must start
by isolating "this" x .

Good luck.

$$2x + 5y = 1$$

$$3x - 7y = 2$$

$$2(2+7y) + 5y = 1$$

$$3x = 2 + 7y$$

divide by 3

$$2(2+7y) + 5y = 1$$

$$x = \frac{2+7y}{3}$$

$$4 + 14y + 5y = 1$$

$$29y = -1$$

$$y = -\frac{1}{29}$$

Solution

$$\left(\frac{17}{29}, -\frac{1}{29} \right)$$

$$2x + 5\left(-\frac{1}{29}\right) = 1$$

$$2x - \frac{5}{29} = 1$$

$$2x = 1 + \frac{5}{29}$$

$$x = \frac{34}{58} \quad x = \frac{17}{29}$$

Labeling Your HW

32 

35 


36 

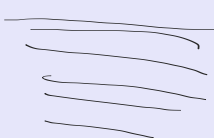
OK as long as on the top of the paper is the complete assignment

3... 33, 35-38, 41, 42

if not ...

every problem should the chapter # with it

2-35 

3-37 

After Test Assignment

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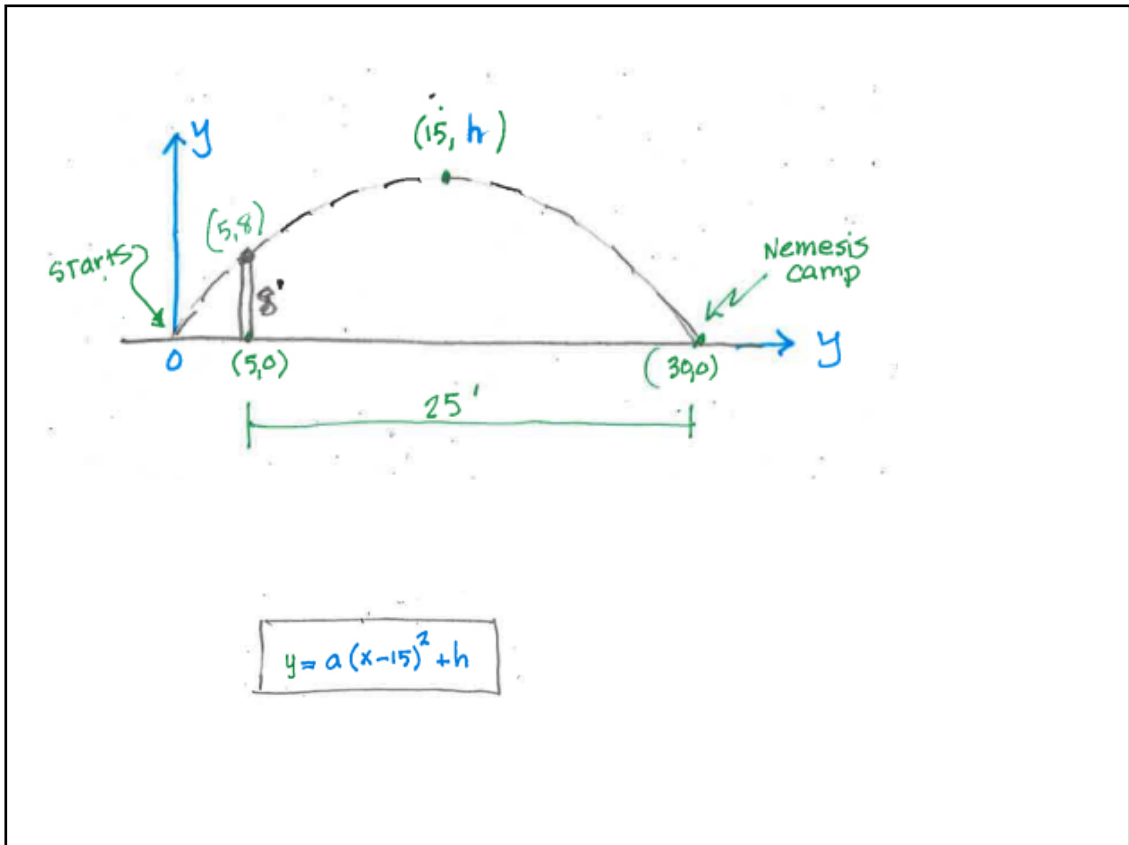
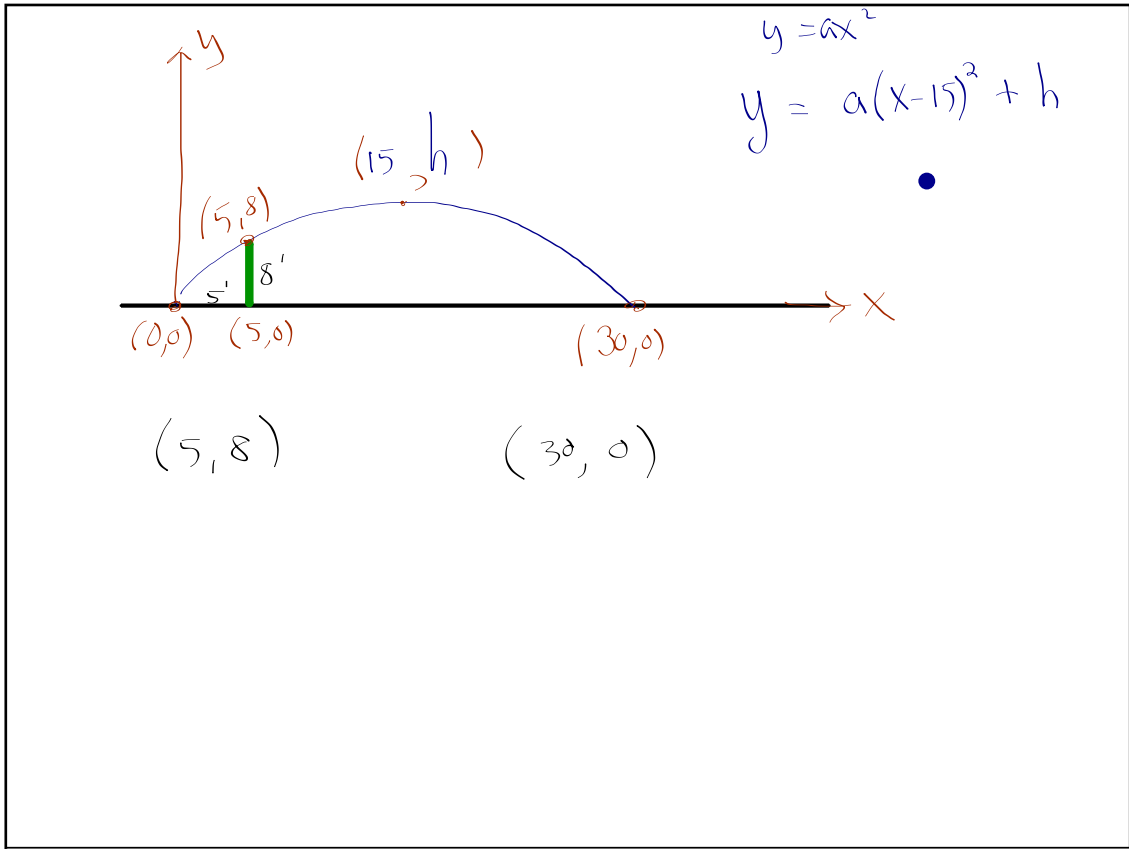
Name _____

In a neighborhood water balloon battle, Dudley has developed a winning strategy. He has his home base situated five feet behind an eight-foot fence. 25 feet away on the other side of the fence is his nemesis' camp. Dudley uses a water balloon launcher, and shoots his balloons so that they just miss the fence and land in his opponent's camp. Write an equation that, when graphed, will model the trajectory (path) of the water balloon. Include a labeled diagram.

ATTEMPT TO SET UP YOUR AXES (X AND Y) SO THAT THE WATER BALLOON STARTS AT X=0

d

February 03, 2020



$$y = a(x-15)^2 + h$$

$$(5, 8)$$

$$8 = a(5-15)^2 + h$$

↓

$$8 = 100a + h$$

$$(30, 0)$$

$$0 = a(30-15)^2 + h$$

$$0 = 225a + h$$

Solve system of
linear equations

$$8 = 100a + h \rightarrow$$

$$0 = 225a + h \rightarrow$$

↑

$$-8 = -100a - h$$

$$0 = 225a + h$$

$$-8 = 125a$$

$$a = \frac{-8}{125}$$

$$8 = 100\left(\frac{-8}{125}\right) + h$$

$$8 = -6.4 + h$$

$$h = 14.4$$

$$y = -\frac{8}{125}(x-15)^2 + 14.4$$

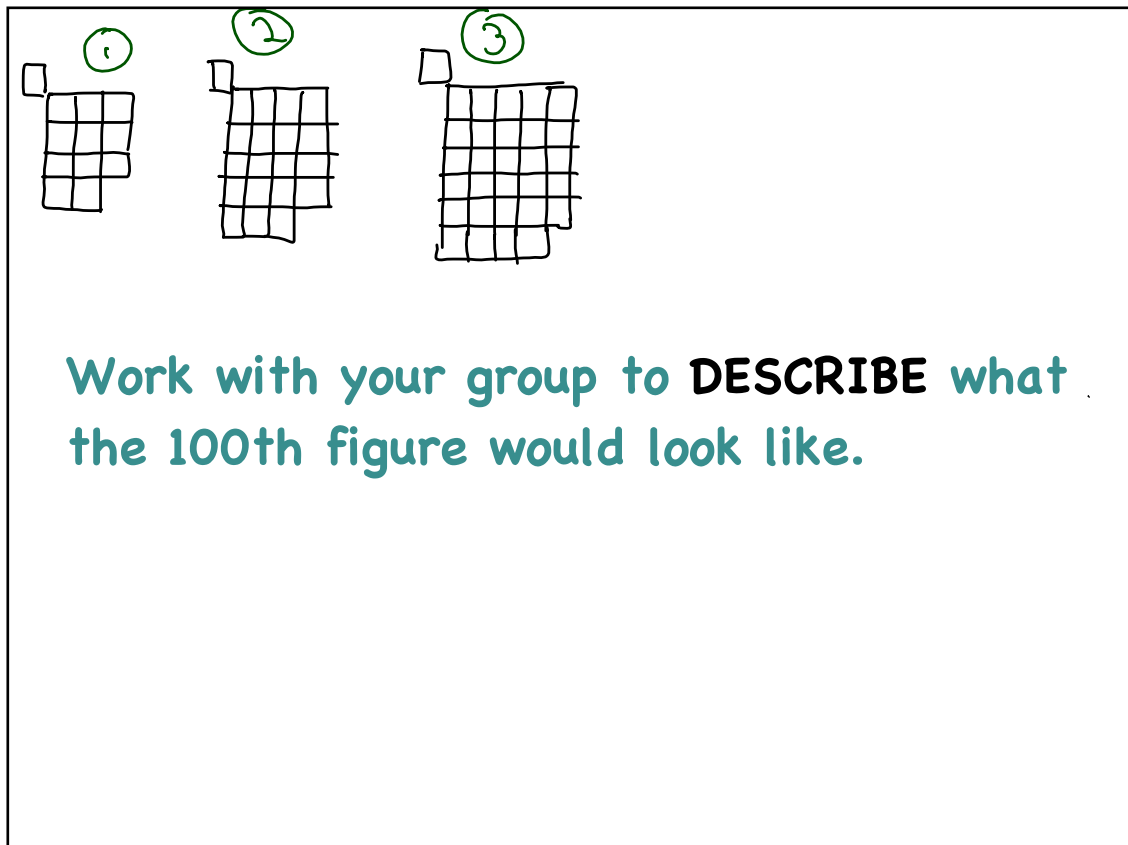
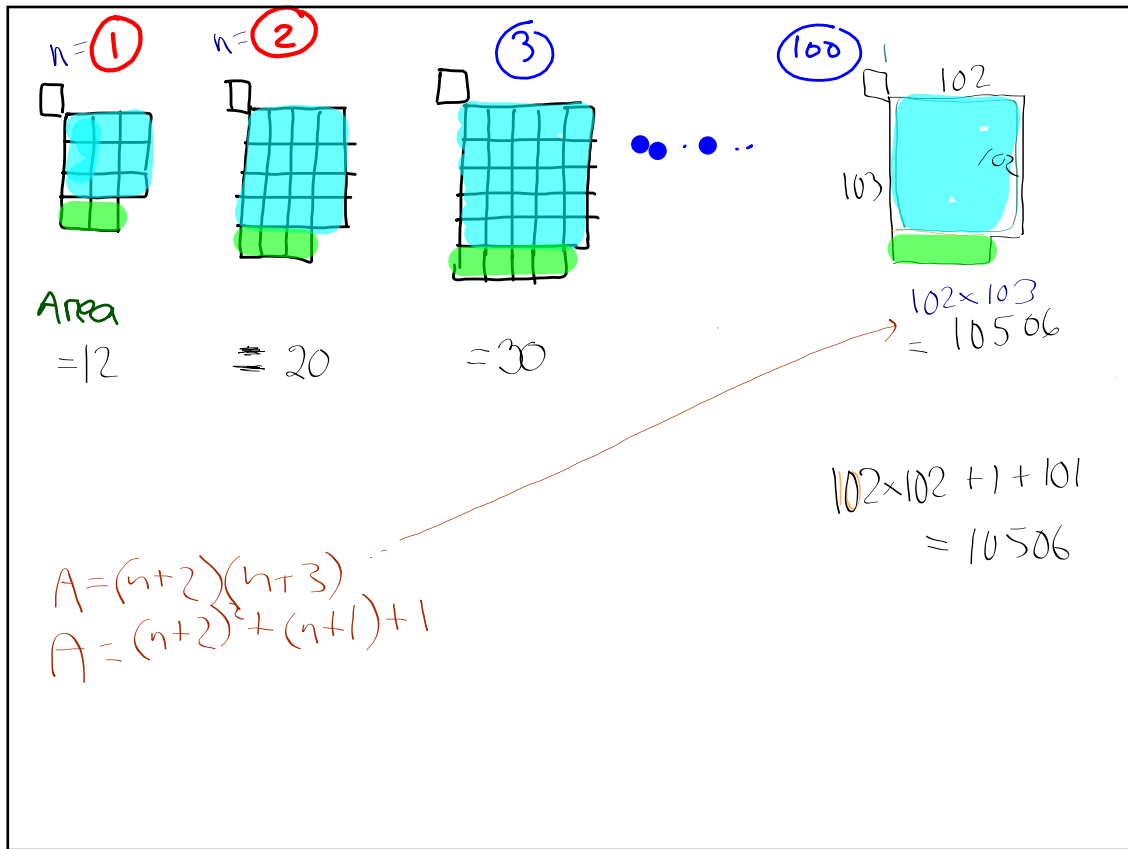
Use your model to predict the height of the balloon at the exact moment it has traveled 20 feet along the ground (total).

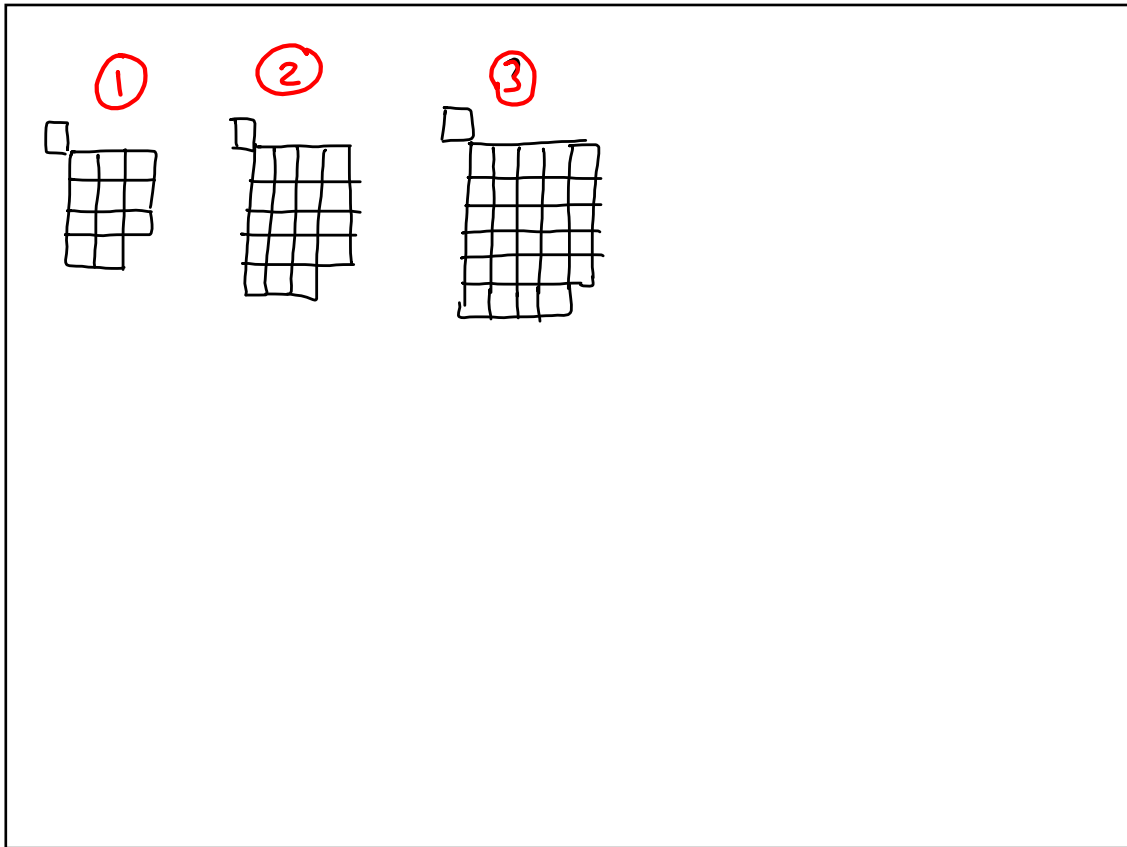
$$y = -\frac{8}{125} (x - 15)^2 + 14.4 \quad \approx 12.8 \text{ feet}$$

Ch. 3 Equivalent Expressions

NOTES

learn to re-write expressions
of many different types





· find the areas

12 20 30

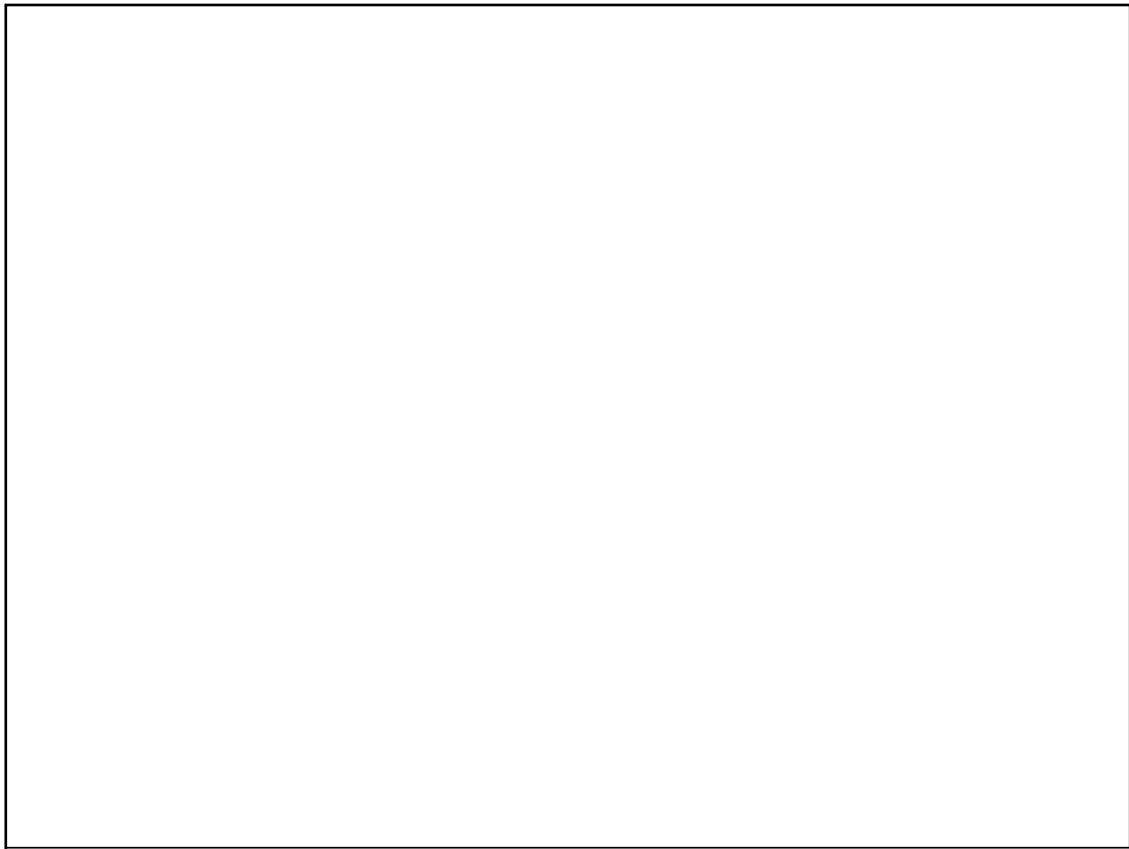
Then find as many expressions as you can for the area (# of tiles) for the **n**th figure. .

Which figure has
600 tiles ?

Assignment

3 5-9, 11-12

If you did not take the test
yesterday, come up and talk to
me at this time.



- Each team of 4 breaks into 2 pairs .
- Each pair gets one paper and one pencil .
- Student #1 does the writing , while student #2 does the explaining

However
If #1 doesn't understand what is being said then they should ask #2 for an explanation , and not just blindly write down .

• Reverse Roles after the first problem.

• When both groups have finished the first two problems, but not before, compare answers.

• Then do the same thing for "c" and "d"