## Created by Kara Spear

## Warmup $9 /(\sqrt{144}-12+6 \times 2)$

## Throwback Thursday

A babysitter earns $\$ 8$ an hour for babysitting 2 children and an additional $\$ 3$ tip when both children are put to bed on time. If the babysitter gets the children to bed on time, what expression could be used to determine how much the babysitter earned?
A) $8 x+3$, where $x$ is the number of hours
B) $3 x+8$, where $x$ is the number of hours
C) $x(8+2)+3$, where $x$ is the number of children
D) $3 x+(8+2)$, where $x$ is the number of children

To cut a lawn, Allan charges a fee of $\$ 15$ for his equipment and $\$ 8.50$ per hour spent cutting a lawn. Taylor charges a fee of $\$ 12$ for his equipment and $\$ 9.25$ per hour spent cutting a lawn. If $x$ represents the number of hours spent cutting a lawn, what are all the values of $x$ for which Taylor's total charge is greater than Allan's total charge?
A) $x>4$
B) $3 \leq x \leq 4$
C) $4 \leq x \leq 5$
D) $x<3$

Go over HW

## ALWAYS LOOK HERE FIRST!!! THE DEPENDENT VARIABLE TELLS YOU WHAT THE GRAPH IS MEASURING!!!



Time

## Matching a Graph to a Story

A. Tom took his dog for a walk to the park. He set off slowly and then increased his pace. At the park Tom turned around and walked slowly back home.
B. Tom rode his bike east from his home up a steep hill. After a while the slope eased off. At the top he raced down the other side.
C. Tom went for a jog. At the end of his road he bumped


Time into a friend and his pace slowed. When Tom left his friend he walked quickly back home.

## Matching in Groups

- Match the stories to the graphs!!!
- Call me over when you think they're right.

Whiteboards!

## Trends in the graphs?

For all questions, assume the $y$-axis is "Distance from home."

- On this type of graph, what does a horizontal line mean?

The person is stopped.

- If one section of the graph is steeper than another, what does that mean?

The person is going faster.

- If the graph is decreasing, what does that mean?

The person is getting closer to home.

- If the graph touches the $x$-axis, what does, that mean?

The person is at home.
Distance
from Home

## HOWEVER:

All of this changes if the $y$-axis was labeled differently! Let's look at some examples.

## How would this graph look?

Tom left his house, running at a fast, constant speed.


## Different y-axis labels

"Tom went out for a walk with some friends. He suddenly realized he left his wallet behind. He ran home to get it and then had to run to catch up with the others."


## Draw a graph:

You leave home, walking at a slow constant rate. After a few blocks, you see a scary lion. You turn around and run straight home.


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## Homework

## Worksheet

