



SI Form Story Problems

Today's Learning Targets:

5.10 - I can define the rate of change in relation to the real-life situation.

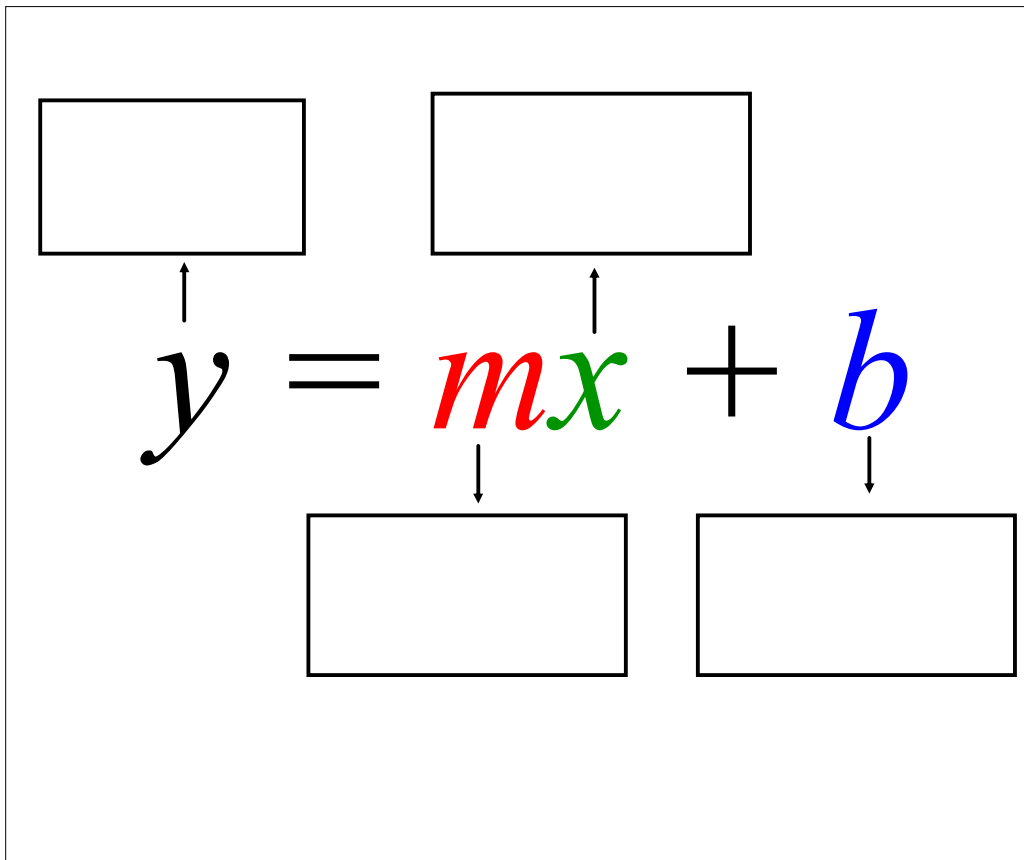
5.11 - I can define the y-intercept in relation to the real-life situation.

3 ways to find slope:

Graph

2 points

Equation



A plumber charges a \$65 fee for a repair plus \$35 an hour. Write an equation to model the total cost (y) of a repair that takes (x) hours.

1. Define variables $x =$ $y =$
2. Find m & b --- Write equation ($y = mx + b$)
3. Answer question

If he works for 8 hours, how much will it cost?

There is 6" of snow on the ground and it is going to snow 2" per hour tonight.

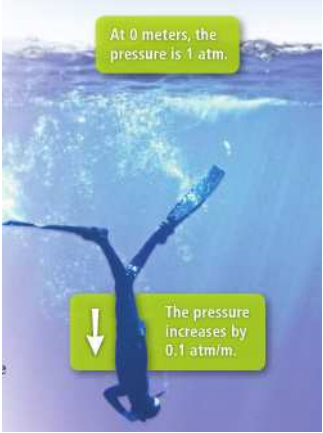
1. Define variables $x =$ $y =$
2. Find m & b --- Write equation ($y = mx + b$)
3. Answer question

If there is a total of 28 inches on the ground in the morning, how many hours did it snow?

Water pressure can be measured in atmospheres (atm). Use the information in the diagram to write an equation that models the pressure y at a depth of x meters.

1. Define variables $x =$ $y =$
2. Find m & b --- Write equation ($y = mx + b$)
3. Answer question

If we go down 100 meters, what is the pressure?



The diagram shows a diver underwater. A callout at the top says "At 0 meters, the pressure is 1 atm." A callout at the bottom, with a downward arrow, says "The pressure increases by 0.1 atm/m."

Unit 5 - 5.10 & 4.11

To move into an apartment, there is a \$450 security deposit, then it costs \$550 per month.

1. Define variables $x =$ $y =$
2. Find m & b --- Write equation ($y = mx + b$)
3. Answer question

If you live there for 6 months, how much does it cost total?