

#1

Mackenzie sells strawberries out of the back of her van. In order to predict the required stock write a formula to relate the number of strawberries lost w to the hour x if she sells 5 per hour but has to throw out 1 moldy one. e.g. $y=1x+5$

Show your work

#2

The city produces 13 jobs every year r . Write an equation to show the relationship between how many jobs are produced each year, and the total number of jobs q if there are already 9 available. e.g. $y=1x+1$

Show your work

#3

Choose the best answer

Out at Camp Joshua the squirrels like to sneak and steal sunflower seeds out of the birdfeeder at a rate 15 per hour. Write a formula to find the number seeds lost x related to the hour y if a gust of wind blows 3 seeds out of the feeder. e.g. $y=1x+5$

☐ $x = -15y - 3$

☐ $15y = 3x$

☐ $x = 3y - 15$

☐ $3y = -15 + x$

Show your work

#4

Julia is running a business and wants to predict the money lost to vehicle repairs.

Vehicle maintenance costs are \$9 per month and there was a one time credit of \$1 given to her by the mechanic. Find the formula to relate the lost vehicle repair costs s and the month t . e.g. $y=1x+5$

Show your work

#5

Choose the best answer

Out at Camp Jack the squirrels like to sneak and steal sunflower seeds out of the birdfeeder at a rate 14 per hour. Write a formula to find the number seeds lost i related to the hour j if a gust of wind blows 2 seeds out of the feeder. e.g. $y=1x+5$

☐ $i = -14j - 2$

☐ $14j = -2i$

☐ $i = -2j - 14$

☐ $2j = -14 - i$

Show your work

#6

A plumber makes \$10 an hour, and wants to calculate how much money she will make in x hours if they also get a flat rate of \$5. Write an equation to show the relationship between money made per hour and total money made w . e.g.

$y=1x+1$

Show your work

#7

Choose the best answer

The city produces 17 jobs every year k . Write an equation to show the relationship between how many jobs are produced each year, and the total number of jobs j if there are already 5 available. e.g. $y=1x+1$

☐ $j=17k + 5$

☐ $j=-5k - 17$

☐ $5k=-17 + j$

☐ $17k=5j$

Show your work

#8

Astronaut Matilda needs to do an EVA in her spacesuit and wants to calculate how much oxygen she will be lost at every minute. Matilda consumes 19 units of oxygen every minute and she has to use 1 unit to purge water in the system. Write an equation to relate the amount of oxygen lost h and the amount of minutes i that have passed. e.g. $y=1x$

Show your work

#9

Choose the best answer

Pioneers are buying mules to trek across the country. Each of the 18 wagons require h mules to pull them. Write the equation to express the relationship between the total mules g they need to pull all the wagons if they need 10 spare mules. e.g. $y=1x+1$

☐ $g=10h + 18$

☐ $18h=-10g$

☐ $10h=18 - g$

☐ $g=18h + 10$

Show your work

#10

The town water tower is leaking 6 water units per day. Relate the amount of water lost n and the day o if 2 units were added via the reserve tank. e.g. $y=1x+5$

Show your work

#11

Choose the best answer

The town water tower is leaking 2 water units per day. Relate the amount of water lost t and the day u if 7 units were lost due to theft. e.g. $y=1x+5$

- ☐ $7u=2-t$ ☐ $2u=-7t$
- ☐ $t=7u+2$ ☐ $t=-2u-7$

Show your work

#12

Farmer Ava has a supply of hay to feed the cows everyday. Write a formula to relate the hay lost l and the number of days m if the cows eat 17 bails of hay per day and Ava loses 3 bales due to mold. e.g. $y=1x+5$

Show your work

Question	Answer
#1	$w = -5x - 1$
#2	$q = 13r + 9$
#3	choice 1
#4	$s = -9t + 1$
#5	choice 1
#6	$w = 10x + 5$
#7	choice 1
#8	$h = -19i - 1$
#9	choice 4
#10	$n = -6o + 2$
#11	choice 4
#12	$l = -17m - 3$