

#1

You are taking your grain to market tomorrow and have  $o$  bushels of wheat, and each bushel sells for \$18. Write an equation that shows the relationship between the total worth  $n$ , and the number of bushels, e.g.  $y=1x$ .

Show your work

#2

## Choose the best answer

A plumber makes \$36 an hour, and wants to calculate how much money she will make in  $q$  hours. Write an equation to show the relationship between the money made per hour and the total money made  $p$ , e.g.  $y=1x$ .

- $p=36q$                         $q=p36$   
  $q=-36p$                         $p=-q36$

Show your work

#3

## Choose the best answer

Astronaut Isabella needs to do an EVA in her spacesuit and wants to calculate how much oxygen she will lose every minute. If Isabella consumes 11 units of oxygen every minute, write an equation to relate the amount of oxygen lost  $j$  and the amount of minutes  $k$  that have passed. e.g.  $y=1x$

- $j=-11k$                         $k=11j$   
  $k=j11$                         $j=-k11$

Show your work

#4

## Choose the best answer

Gabriel wants a formula to figure out how far he goes on his runs. He will need the total distance  $m$ , and how many blocks he ran  $n$ . If a block is 26 meters, write the equation he needs, e.g.  $y=1x$ .

- $m=26n$                         $n=-m26$
- $n=26m$                         $m=n26$

Show your work

#5

Pioneers are buying mules to trek across the country. Each of the 3 wagons require 1 mules to pull them. Write the equation to express the relationship between the total mules  $k$  they need to pull and all the wagons, e.g.  $y=1x$ .

Show your work

#6

## Choose the best answer

Mia 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  $r$  to the hour  $s$  if she sells 13 per hour. e.g.  $y=1x$

- $s=-13r$                         $s=r13$
- $r=s13$                         $r=-13s$

Show your work

#7

## Choose the best answer

Mia 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  $r$  to the hour  $s$  if she sells 13 per hour. e.g.  $y=1x$

- $s=-13r$                         $s=r13$   
  $r=s13$                           $r=-13s$

Show your work

#8

## Choose the best answer

Emily makes \$28 an hour. Write an equation that shows the relationship between the money made  $j$  and the hours worked  $k$ , e.g.  $y=1x$ .

- $k=28j$                           $j=28k$   
  $j=k28$                           $k=j28$

Show your work

#9

## Choose the best answer

The International Space Station (ISS) relies on solar panels and batteries for its power. When the ISS is in the shadow of the Earth, the battery drains at a rate of 32 power units per hour. Find the formula to relate the number of hours  $p$  to the amount of power loss  $o$ . e.g.  $y=1x$

- $p=-32o$                           $p=o32$   
  $o=p32$                           $o=-32p$

Show your work

#10

You want to sell your horse figurine collection of  $r$  figurines for \$30 each.

Write an equation to show the relationship between the total money made  $q$  and the price of figurines, e.g.  $y=1x$ .

Show your work

#11

Pioneers are buying mules to trek across the country. Each of the 15 wagons require  $e$  mules to pull them. Write the equation to express the relationship between the total mules  $d$  they need to pull and all the wagons, e.g.  $y=1x$ .

Show your work

#12

## Choose the best answer

Farmer Zoe needs to figure out how many total cattle  $j$  she will have next year. She counts her cattle  $k$  and knows each will produce 19 calves each year. Write an equation that shows this relationship and can be used to calculate how many cattle Zoe will have next year, e.g.  $y=1x$ .

- $j=19k$                         $k=j19$
- $j=-k19$                         $k=-19j$

Show your work

Question	Answer
#1	$n=18o$
#2	choice 1
#3	choice 1
#4	choice 1
#5	$k=3l$
#6	choice 4
#7	choice 4
#8	choice 2
#9	choice 4
#10	$q=30r$
#11	$d=15e$
#12	choice 1