

#1

Farmer Anna needs to figure out how many total cattle  $i$  she will have next year. She counts her cattle  $j$  and knows each will produce 28 calves each year. Write an equation that shows this relationship and can be used to calculate how many cattle Anna will have next year, e.g.  $y=1x$ .

Show your work

#2

## 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

#3

Pioneers are buying mules to trek across the country. Each of the 18 wagons require  $t$  mules to pull them. Write the equation to express the relationship between the total mules  $s$  they need to pull and all the wagons, e.g.  $y=1x$ .

Show your work

#4

Farmer Brianna has a supply of hay to feed the cows everyday. Write a formula to relate the hay lost  $c$  and the number of days  $d$  if the cows eat 26 bails of hay per day. e.g.  $y=1x$

Show your work

#5

Farmer William's total chicken flock  $n$  is decreasing. He loses 14 per week. Write a formula to represent the relationship between the total number of chickens and the number of weeks  $o$ . e.g.  $y=1x$

Show your work

#6

Diana wants to make a unicorn hair wig, but a unicorn only sheds 36 hairs a day. Write an equation to show the relationship between days  $i$  and the total unicorn hairs shed  $h$ , e.g.  $y=1x$ .

Show your work

#7

## Choose the best answer

Pioneers are buying mules to trek across the country. Each of the 40 wagons require  $l$  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.  $y=1x$ .

☐  $l=40k$

☐  $l=k40$

☐  $k=l40$

☐  $k=40l$

Show your work

#8

## 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

#9

Dylan wants to make a unicorn hair wig, but a unicorn only sheds 9 hairs a day. Write an equation to show the relationship between days  $r$  and the total unicorn hairs shed  $q$ , e.g.  $y=1x$ .

Show your work

#10

## 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

#11

Astronaut Ryan needs to do an EVA in his spacesuit and wants to calculate how much oxygen he will lose every minute. If Ryan consumes 9 units of oxygen every minute, write an equation to relate the amount of oxygen lost  $k$  and the amount of minutes  $l$  that have passed. e.g.  $y=1x$

Show your work

#12

## Choose the best answer

The city produces 11 jobs every year  $g$ . Write an equation to show the relationship between how many jobs are produced each year, and the total number of jobs  $f$ , e.g.  $y=1x$ .

☐  $f=-g11$

☐  $g=-f11$

☐  $f=11g$

☐  $g=-11f$

Show your work

Question	Answer
#1	$i=28j$
#2	choice 1
#3	$s=18t$
#4	$c=-26d$
#5	$n=-14o$
#6	$h=36i$
#7	choice 4
#8	choice 1
#9	$q=9r$
#10	choice 1
#11	$k=-9l$
#12	choice 3