

#1

## Choose the best answer

Angela wants to make a unicorn hair wig, but a unicorn only sheds 2 hairs a day. Write an equation to show the relationship between days  $j$  and the total unicorn hairs shed  $i$ , e.g.  $y=1x$ .

☐  $i=2j$

☐  $j=-i2$

☐  $j=2i$

☐  $i=-j2$

Show your work

#2

Farmer Jack's total chicken flock  $b$  is decreasing. He loses 38 per week. Write a formula to represent the relationship between the total number of chickens and the number of weeks  $c$ . e.g.  $y=1x$

Show your work

#3

## Choose the best answer

You want to sell your horse figurine collection of  $d$  figurines for \$21 each. Write an equation to show the relationship between the total money made  $c$  and the price of figurines, e.g.  $y=1x$ .

☐  $c=-d21$

☐  $d=21c$

☐  $d=-c21$

☐  $c=21d$

Show your work

#4

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

#5

## Choose the best answer

Since starting a new recycling plan, Isabelle's office recycles 39 kilograms of paper each week. Write an equation that shows the relationship between the weeks  $i$  and the paper recycled  $h$ , e.g.  $y = 1x$ .

☐  $i = -39h$

☐  $h = 39i$

☐  $h = -i39$

☐  $i = h39$

Show your work

#6

## Choose the best answer

Mackenzie is running a business and wants to predict the money lost to vehicle repairs. Repair costs are \$26 per month. Find the formula to relate the lost vehicle repair costs  $p$  and the month  $q$ . e.g.  $y=1x$

☐  $p = q26$

☐  $q = -26p$

☐  $q = p26$

☐  $p = -26q$

Show your work

#7

## Choose the best answer

Sophia is running a business and wants to predict the money lost to vehicle repairs. Repair costs are \$35 per month. Find the formula to relate the lost vehicle repair costs  $w$  and the month  $x$ . e.g.  $y=1x$

- ☐  $w=-35x$ 
☐  $x=w35$
- ☐  $w=-x35$ 
☐  $x=35w$

Show your work

#8

Out at Camp Maya the squirrels like to sneak and steal sunflower seeds out of the birdfeeder at a rate 33 per hour. Write a formula to find the number seeds lost  $u$  related to the hour  $v$ . e.g.  $y=1x$

Show your work

#9

## Choose the best answer

Logantown is going through an economic downturn and jobs are being lost at a rate of 18 per month. As the mayor of Logantown, write a formula to relate the number of months  $n$  to the number of jobs lost  $m$ . e.g.  $y=1x$

- ☐  $m=n18$ 
☐  $n=18m$
- ☐  $n=-m18$ 
☐  $m=-18n$

Show your work

#10

## Choose the best answer

Astronaut Savannah needs to do an EVA in her spacesuit and wants to calculate how much oxygen she will lose every minute. If Savannah consumes 34 units of oxygen every minute, write an equation to relate the amount of oxygen lost  $o$  and the amount of minutes  $p$  that have passed. e.g.  $y=1x$

☐  $o = -34p$

☐  $p = 34o$

☐  $p = o34$

☐  $o = -p34$

Show your work

#11

Jacob wants to make a unicorn hair wig, but a unicorn only sheds 14 hairs a day. Write an equation to show the relationship between days  $s$  and the total unicorn hairs shed  $r$ , e.g.  $y=1x$ .

Show your work

#12

Kaylatown is going through an economic downturn and jobs are being lost at a rate of 2 per month. As the mayor of Kaylatown, write a formula to relate the number of months  $y$  to the number of jobs lost  $x$ . e.g.  $y=1x$

Show your work

| Question | Answer     |
|----------|------------|
| #1       | choice 1   |
| #2       | $b = -38c$ |
| #3       | choice 4   |
| #4       | $k = 3l$   |
| #5       | choice 2   |
| #6       | choice 4   |
| #7       | choice 1   |
| #8       | $u = -33v$ |
| #9       | choice 4   |
| #10      | choice 1   |
| #11      | $r = 14s$  |
| #12      | $x = -2y$  |