1. The table below shows the relationship between the number of calories burned and the minutes of exercise.

Minutes of Exercise	Calories Burned
30	250
12	100
57	475
39	325

Which equation could be used to find the number of calories burned (*c*) in relation to the minutes (*m*) of exercise?

A $c = \frac{3}{25}m$ **B** $c = \frac{25}{3}m$ **C** $c = 150m$ **D** $c = 220m$

2. Donna recorded the number of hours she tutored each week for 4 weeks and what she earned for the week in the table below.

Weekly Earnings

Number of Hours Worked	Earnings
2	$50
4	$100
5	$125
8	$200

If *x* represents the number of hours Donna worked and *y* represents her earnings, which equation represents this relationship?

A $y = 50 + x$ **B** $y = 25 + x$ **C** $y = 50x$ **D** $y = 25x$

3. Which equation could be used to represent the data in the table?

x	*y*
–3	–9
–1	–3
3	9
7	21

A $y = 3x$

B $y = -3x$

C $y = x + 6$

D $y = x - 3$

4. Which equation represents the relationship between *x* and *y* values in the table below?

x	*y*
–3	–6
–1	–2
2	4
5	10

A $y = 2x$

B $y = -2x$

C $y = x + 2$

D $y = x - 2$

5. In the table below, Brandon recorded the number of hours he babysat and the amount of money he earned. Which equation represents how much money Brandon would earn babysitting for *h* hours?

Hours (*h*) of Babysitting	Amount Earned (*e*)
3	$27
5	$45
6	$54

A $27h = e$

B $18h = e$

C $9h = e$

D $3h = e$

6. Which equation shows the relationship between the *x* and *y* values in the table below?

x	*y*
–2	–8
–1	–4
0	0
1	4
2	8

A $y = x + 4$

B $y = x - 4$

C $y = 4x$

D $y = -4x$

7. Using the data from the table, which equation represents the relationship between *x* and *y* values?

x	*y*
–3	36
–1	12
2	–24
6	–72

A $y = 12x$

B $y = -12x$

C $y = 33 + x$

D $y = 24 + x$

8. Which equation represents the relationship between *x* and *y* in the table below?

x	*y*
–1	4
3	–12
5	–20
9	–36

A $y = x + 4$

B $y = x - 4$

C $y = 4x$

D $y = -4x$

9. The weight of an object on Earth varies directly with its weight on the moon. The table below shows different weights of objects on Earth, *x*, compared to their weights on the moon, *y*. All weights are in pounds.

Weight on Earth (*x*)	Weight on Moon (*y*)
60	10
120	20
240	40
360	60

Which equation will calculate the weight, in pounds, of an object on the moon when its weight on Earth is *x* pounds?

A $y = \frac{1}{2}x$ **B** $y = \frac{1}{6}x$ **C** $y = 60x$ **D** $y = 10x$

10. Which equation could be used to represent the data in the table?

x	***y***
2	–6.5
5	–16.25
9	–29.25
11	–35.75

A $y = x + -9.75$

B $y = x + -4.5$

C $y = -3.25x$

D $y = -3.5x$