

2016 Mathematics Standards of Learning
Algebra Readiness Formative Assessment

7.10c

1. Maria has 3 ceramic cats. She plans to buy some more. Write an equation in the form of $y = x + b$, $b \neq 0$ that could represent the total number of cats, when given the number of new cats.
2. The table below shows the relationship between x and y .

x	y
-2	-6
-1	-5
1	-3
2	-2

What is the y-intercept for this relationship?

3. The table below shows the relationship between x and y .

x	0	4	12
y	6	10	18

- a. Create a verbal description to a practical problem that represents the relationship between x and y
- b. What is the y- intercept?
- c. Write an equation in the form of $y = x + b$, $b \neq 0$

2016 Mathematics Standards of Learning
Algebra Readiness Formative Assessment

4. The table shows the relationship between Ky's age and Lu's age.

Lu's Age	1	4	10
Ky's Age	8	11	17

Which equation could be used to determine Ky's age, when given Lu's age.

- A. $y = 8x$
- B. $y = x + 7$
- C. $y = 2x + 6$
- D. $y = \frac{1}{2}x + 7.5$

5. The table below shows the relationship between x and y .

x	-3	2	5
y	-4	1	4

Which could be used to represent the relationship between x and y ?

- A. $y = \frac{1}{2}x$
- B. $y = x + 1$
- C. $y = x - 1$
- D. $y = 2x - 1$