

2016 Mathematics Standards of Learning  
Algebra Readiness Formative Assessment

1A.4b

1. What is the solution set to the equation  $6x^2 + 5x = 4$  ?

A.  $\left\{\frac{1}{2}, \frac{4}{3}\right\}$

B.  $\left\{-\frac{4}{3}, \frac{1}{2}\right\}$

C.  $\left\{-\frac{1}{2}, \frac{4}{3}\right\}$

D.  $\left\{-\frac{4}{3}, -\frac{1}{2}\right\}$

2. What are the solutions to the equation  $0 = x^2 - 6x$  ?

Solutions: \_\_\_\_\_

3. Select all correct solutions to the equation  $x^2 - 9x = 36$  .

$x = 12$	$x = -12$	$x = 36$
$x = -36$	$x = 3$	$x = -3$

4. What is the solution set to the equation  $2x^2 - 6x = 8$  ?

Solution Set: \_\_\_\_\_

5. What are the solutions in simplest radical form to the equation

$$2x^2 + 6x - 1 = 0 ?$$

A.  $-3 \pm \sqrt{7}$

B.  $-3 \pm 2\sqrt{7}$

C.  $\frac{-3 \pm 2\sqrt{11}}{2}$

D.  $\frac{-3 \pm \sqrt{11}}{2}$

Solution: \_\_\_\_\_

6. What are two algebraic methods that can be used to determine the solution set to the equation

$$x^2 + 12x - 28 = 0?$$

1. \_\_\_\_\_
2. \_\_\_\_\_

7. A large flag has the following measurements. Length:  $x+12$  ; width:  $x+6$ . The area of the flag is 160 square feet. What are the actual dimensions of the length and width of this flag?

Dimensions: \_\_\_\_\_