Regents Exam Questions A.REI.B.3: Expressions www.jmap.org

## **A.REI.B.3: Expressions**

- 1 An example of an algebraic expression is
  - $1) \quad 6x 2y \ge 4$
  - $2) \quad 3x + 2y < -10$
  - 3) (x-4)(x-1) = 6
  - 4)  $3x^2 10x 3$
- 2 An example of an algebraic expression is

1) 
$$\frac{2x+3}{7} = \frac{13}{x}$$

- 2) (2x+1)(x-7)
- 3) 4x 1 = 4
- 4) x = 2
- 3 An example of an algebraic expression is
  - 1) x + 2
  - $2) \quad y = x + 2$
  - $3) \quad y < x+2$
  - $4) \quad y = x^2 + 2x$
- 4 An example of an algebraic expression is
  - 1) y = mx + b
  - 2) 3x + 4y 7
  - $3) \quad 2x + 3y \le 18$
  - 4) (x+y)(x-y) = 25
- 5 Four students are playing a math game at home. One of the math game questions asked them to write an algebraic equation.

Brandon wrote: 3(5x - 0)William wrote: 7 < 2(6 + x)Alice wrote: 15xKayla wrote: 11 = 2x + 3

- Which student wrote an algebraic equation?
- 1) Brandon
- 2) William
- 3) Alice
- 4) Kayla

6 Mr. Stanton asked his students to write an algebraic expression on a piece of paper. He chose four students to go to the board and write their expression.

Robert wrote:  $4(2x+5) \ge 17$ 

Meredith wrote: 3y - 7 + 11z

Steven wrote: 9w + 2 = 20

Cynthia wrote: 8 + 10 - 4 = 14

Which student wrote an algebraic expression?

- 1) Robert
- 2) Meredith
- 3) Steven
- 4) Cynthia
- 7 An example of an equation is
  - 1)  $2x^2 4x + 12$
  - 2) |x-6|
  - 3) 4(x+6)(x-2)
  - 4)  $2x = x^2 + 3$
- 8 An example of an algebraic equation is
  - 1)  $r^2 + 1$
  - 2) 2a + (n-1)d
  - 3) 5x = 7
  - 4)  $-25\pi + 100$
- 9 Chad complained to his friend that he had five equations to solve for homework. Are all of the homework problems equations? Justify your answer.

Math Homework	
1.	3x <sup>2</sup> • 2x <sup>4</sup>
2.	5-2x = 3x
3.	3(2 <i>x</i> + 7)
4.	$7x^2 + 2x - 3x^2 - 9$
5.	$\frac{2}{3} = \frac{x+2}{6}$
Name	Chad

Name:

## A.REI.B.3: Expressions Answer Section

- 1 ANS: 4 REF: 061618ia
- 2 ANS: 2 REF: 011027ia
- 3 ANS: 1 REF: 081030ia
- 4 ANS: 2 REF: 061121ia
- 5 ANS: 4 REF: 011508ia
- 6 ANS: 2 REF: 011227ia
- 7 ANS: 4 REF: 011401ia
- 8 ANS: 3 REF: 061408ia
- 9 ANS:

Not all of the homework problems are equations. The first problem is an expression.

REF: 080931ia