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) $6 x-2 y \geq 4$
2) $3 x+2 y<-10$
3) $(x-4)(x-1)=6$
4) $3 x^{2}-10 x-3$

2 An example of an algebraic expression is

1) $\frac{2 x+3}{7}=\frac{13}{x}$
2) $(2 x+1)(x-7)$
3) $4 x-1=4$
4) $x=2$

3 An example of an algebraic expression is

1) $x+2$
2) $y=x+2$
3) $y<x+2$
4) $y=x^{2}+2 x$

4 An example of an algebraic expression is

1) $y=m x+b$
2) $3 x+4 y-7$
3) $2 x+3 y \leq 18$
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: $3(5 x-0)$
William wrote: $7<2(6+x)$
Alice wrote: $15 x$
Kayla wrote: $11=2 x+3$
Which student wrote an algebraic equation?

1) Brandon
2) William
3) Alice
4) Kayla

Name: $\qquad$

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: $4(2 x+5) \geq 17$
Meredith wrote: $3 y-7+11 z$
Steven wrote: $9 w+2=20$
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) $2 x^{2}-4 x+12$
2) $|x-6|$
3) $4(x+6)(x-2)$
4) $2 x=x^{2}+3$

8 An example of an algebraic equation is

1) $r^{2}+1$
2) $2 a+(n-1) d$
3) $5 x=7$
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. $3 x^{2} \cdot 2 x^{4}$
2. $5-2 x=3 x$
3. $3(2 x+7)$
4. $7 x^{2}+2 x-3 x^{2}-9$
5. $\frac{2}{3}=\frac{x+2}{6}$

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## 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

