A.REI.B.3: Expressions

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

4. An example of an algebraic expression is
   1) $y = mx + b$
   2) $3x + 4y - 7$
   3) $2x + 3y \leq 18$
   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: $3(5x - 0)$
   William wrote: $7 < 2(6 + x)$
   Alice wrote: $15x$
   Kayla 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: $4(2x + 5) \geq 17$
   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. $3x^2 \cdot 2x^4$
2. $5 - 2x = 3x$
3. $3(2x + 7)$
4. $7x^2 + 2x - 3x^2 - 9$
5. $\frac{2}{3} = \frac{x + 2}{6}$
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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