A.APR.A.1 Operations with Polynomials 2

1 The expression $3(x+4)-(2x+7)$ is equivalent to
1) $x+5$
2) $x-10$
3) $x-3$
4) $x+11$

2 Which expression is equivalent to $2(3g-4)-(8g+3)$?
1) $-2g-1$
2) $-2g-5$
3) $-2g-7$
4) $-2g-11$

3 When the expression $2x(x-4)-3(x+5)$ is written in simplest form, the result is
1) $2x^2-11x-15$
2) $2x^2-11x+5$
3) $2x^2-3x-19$
4) $2x^2-3x+1$

4 Which expression is equivalent to $(5x^2-2x+4)-(3x^2+3x-1)$?
1) $2x^2+x+3$
2) $2x^2-5x+5$
3) $2x^4+x^2+3$
4) $2x^4-5x^2+5$

5 The expression $(-x^2+3x-7)-(4x^2+5x-2)$ is equivalent to
1) $-5x^2-2x-9$
2) $-5x^2-2x-5$
3) $-5x^2+8x-9$
4) $-5x^2+8x-5$

6 The expression $3(x^2-1)-(x^2-7x+10)$ is equivalent to
1) $2x^2-7x+7$
2) $2x^2+7x-13$
3) $2x^2-7x+9$
4) $2x^2+7x-11$

7 The expression $(5x^2-x+4)-3(x^2-x-2)$ is equivalent to
1) $2x^2-2x+2$
2) $2x^2+2x+10$
3) $2x^4-2x^2+2$
4) $2x^4-2x^2+10$

8 Which expression is equivalent to $3(x^2-2x+3)-(4x^2+3x-1)$?
1) $-x^2+x+2$
2) $-x^2-8x+7$
3) $-x^2-3x+8$
4) $-x^2-9x+10$

9 The expression $3(x^2+2x-3)-4(4x^2-7x+5)$ is equivalent to
1) $-13x-22x+11$
2) $-13x^2+34x-29$
3) $19x^2-22x+11$
4) $19x^2+34x-29$

10 If $C=2a^2-5$ and $D=3-a$, then $C-2D$ equals
1) $2a^2+a-8$
2) $2a^2-a-8$
3) $2a^2+2a-11$
4) $2a^2-a-11$

11 If $A=3x^2+5x-6$ and $B=-2x^2-6x+7$, then $A-B$ equals
1) $-5x^2-11x+13$
2) $5x^2+11x-13$
3) $-5x^2-x+1$
4) $5x^2-x+1$

12 Express in simplest form: $(3x^2+4x-8)-(-2x^2+4x+2)$

13 Subtract $5x^2+2x-11$ from $3x^2+8x-7$. Express the result as a trinomial.

14 If $C=G-3F$, find the trinomial that represents C when $F=2x^2+6x-5$ and $G=3x^2+4$.

15 Subtract $3x(x-2y)$ from $6(x^2-xy)$ and express your answer as a monomial.

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Answer Section

1 ANS: 1
$3(x+4)-(2x+7)=3x+12-2x-7=x+5$

REF: 062102ai
2 ANS: 4
$2(3g-4)-(8g+3)=6g-8-8g-3=-2g-11$

REF: 011707ai
3 ANS: 1
$2x^2-8x-3x-15$

$2x^2-11x-15$

REF: 012301ai
4 ANS: 2 REF: 012506ai
5 ANS: 2 REF: 012406ai
6 ANS: 2
$3(x^2-1)-(x^2-7x+10)$

$3x^2-3-x^2+7x-10$

$2x^2+7x-13$

REF: 061610ai
7 ANS: 2
$5x^2-x+4-3x^2+3x+6=2x^2+2x+10$

REF: 062304ai
8 ANS: 4
$3(x^2-2x+3)-(4x^2+3x-1)$

$3x^2-6x+9-4x^2-3x+1$

$-x^2-9x+10$

REF: 082403ai
9 ANS: 2
$3(x^2+2x-3)-4(4x^2-7x+5)=3x^2+6x-9-16x^2+28x-20=-13x^2+34x-29$

REF: 061803ai
10 ANS: 3
$2a^2-5-2(3-a)=2a^2-5-6+2a=2a^2+2a-11$

REF: 011911ai
11 ANS: 2 REF: 061403ai

12 ANS:
$5x^2 - 10$

REF: 061725ai

13 ANS:
$-2x^2 + 6x + 4$

REF: 011528ai

14 ANS:
$C = 3x^2 + 4 - 3\left(2x^2 + 6x - 5\right) = 3x^2 + 4 - 6x^2 - 18x + 15 = -3x^2 - 18x + 19$

REF: 061926ai

15 ANS:
$6x^2 - 6xy - (3x^2 - 6xy) = 3x^2$

REF: 062228ai