**Regents Exam Questions** 

A.A.13: Addition and Subtraction of Polynomials 4 www.jmap.org

## A.A.13: Addition and Subtraction of Polynomials 4: Add, subtract, and multiply monomials and polynomials

- 1 The expression  $(3x^2 + 2xy + 7) (6x^2 4xy + 3)$  is equivalent to
- 2 The expression  $(x^2 5x 2) (-6x^2 7x 3)$  is equivalent to
- 3 The expression  $(2x^2 + 6x + 5) (6x^2 + 3x + 5)$  is equivalent to
- 4 When  $3x^2 8x$  is subtracted from  $2x^2 + 3x$ , the difference is
- 5 When 5x + 4y is subtracted from 5x 4y, the difference is
- 6 When  $3g^2 4g + 2$  is subtracted from  $7g^2 + 5g 1$ , the difference is
- 7 When  $4x^2 + 7x 5$  is subtracted from  $9x^2 2x + 3$ , the result is
- 8 When  $3a^2 2a + 5$  is subtracted from  $a^2 + a 1$ , the result is

- 9 If  $2x^2 4x + 6$  is subtracted from  $5x^2 + 8x 2$ , the difference is
- 10 When  $3x^2 2x + 1$  is subtracted from  $2x^2 + 7x + 5$ , the result will be
- 11 When  $-2x^2 + 4x + 2$  is subtracted from  $x^2 + 6x 4$ , the result is
- 12 If  $2x^2 x + 6$  is subtracted from  $x^2 + 3x 2$ , the result is
- 13 When  $3a^2 7a + 6$  is subtracted from  $4a^2 3a + 4$ , the result is
- 14 If  $2a^2 6a + 5$  is subtracted from  $3a^2 2a + 3$ , the result is
- 15 What is the result when  $2x^2 + 3xy 6$  is subtracted from  $x^2 - 7xy + 2$ ?
- 16 Subtract  $5x^2 7x 6$  from  $9x^2 + 3x 4$ .
- 17 Subtract  $2x^2 5x + 8$  from  $6x^2 + 3x 2$  and express the answer as a trinomial.

Name: \_\_\_\_\_

## A.A.13: Addition and Subtraction of Polynomials 4: Add, subtract, and multiply monomials and polynomials Answer Section

1 ANS:  $-3x^{2} + 6xy + 4$ REF: 080423a 2 ANS:  $7x^2 + 2x + 1$ REF: 060511a 3 ANS:  $-4x^{2} + 3x$ REF: 010707a 4 ANS:  $-x^{2} + 11x$ REF: 010523a 5 ANS: -8y REF: 061130ia 6 ANS:  $4g^2 + 9g - 3$ REF: 080819ia 7 ANS:  $5x^2 - 9x + 8$ REF: 060923ia 8 ANS:  $-2a^{2}+3a-6$ REF: 010019a 9 ANS:  $3x^2 + 12x - 8$ REF: 060019a 10 ANS:  $-x^{2} + 9x + 4$ 

REF: 080020a

11
ANS:

$$3x^2 + 2x - 6$$

12
REF: 080209a

12
ANS:

 $-x^2 + 4x - 8$ 

13
REF: 010429a

13
ANS:

 $a^2 + 4a - 2$ 

14
ANS:

 $a^2 + 4a - 2$ 

15
REF: 010619a

16
ANS:

 $-x^2 - 10xy + 8$ 

16
ANS:

 $4x^2 + 10x + 2$ 

17
REF: 080123a

17
ANS:

 $4x^2 + 8x - 10$ 

REF: 010934a