

**A.APR.A.1: Operations with Polynomials 1b**

- 1 What is the sum of  $-3x^2 - 7x + 9$  and  $-5x^2 + 6x - 4$ ?
- 2 The sum of  $3x^2 + 5x - 6$  and  $-x^2 + 3x + 9$  is
- 3 The sum of  $8n^2 - 3n + 10$  and  $-3n^2 - 6n - 7$  is
- 4 The sum of  $3x^2 + 4x - 2$  and  $x^2 - 5x + 3$  is
- 5 What is the sum of  $x^2 - 3x + 7$  and  $3x^2 + 5x - 9$ ?
- 6 What is the sum of  $2m^2 + 3m - 4$  and  $m^2 - 3m - 2$ ?
- 7 The sum of  $3x^2 + x + 8$  and  $x^2 - 9$  can be expressed as
- 8 The sum of  $8x^2 - x + 4$  and  $x - 5$  is
- 9 The sum of  $4x^3 + 6x^2 + 2x - 3$  and  $3x^3 + 3x^2 - 5x - 5$  is
- 10 Which polynomial is twice the sum of  $4x^2 - x + 1$  and  $-6x^2 + x - 4$ ?
- 11 What is the sum of  $\frac{d}{2}$  and  $\frac{2d}{3}$  expressed in simplest form?
- 12 The expression  $\frac{2n}{5} + \frac{3n}{2}$  is equivalent to
- 13 The expression  $\frac{5x}{6} + \frac{x}{4}$  is equivalent to

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**Answer Section**

1 ANS:

$$-8x^2 - x + 5$$

REF: 011213ia

2 ANS:

$$2x^2 + 8x + 3$$

REF: 081205ia

3 ANS:

$$5n^2 - 9n + 3$$

REF: 081302ia

4 ANS:

$$4x^2 - x + 1$$

REF: 010108a

5 ANS:

$$4x^2 + 2x - 2$$

REF: 060805a

6 ANS:

$$3m^2 - 6$$

REF: 080807a

7 ANS:

$$4x^2 + x - 1$$

REF: 069904a

8 ANS:

$$8x^2 - 1$$

REF: 080710a

9 ANS:

$$7x^3 + 9x^2 - 3x - 8$$

REF: 061003ia

10 ANS:

$$-4x^2 - 6$$

REF: 011813ai

11 ANS:

$$\frac{7d}{6}$$
$$\frac{(d \times 3) + (2 \times 2d)}{2 \times 3} = \frac{3d + 4d}{6} = \frac{7d}{6}$$

REF: fall0727ia

12 ANS:

$$\frac{19n}{10}$$
$$\frac{2n}{5} + \frac{3n}{2} = \frac{4n + 15n}{10} = \frac{19n}{10}$$

REF: 011420ia

13 ANS:

$$\frac{13x}{12}$$
$$\frac{(5x \times 4) + (6 \times x)}{6 \times 4} = \frac{20x + 6x}{24} = \frac{26x}{24} = \frac{13x}{12}$$

REF: 060625a