Math 2A Name_____ ID: 1

Unit 2 Review

Date_____ Period____

Name each polynomial by degree and number of terms.

1) $-5x^4 + 2x^3 - 5x$

A) fourth degree trinomial
B) constant trinomial
C) fifth degree monomial
D) third degree trinomial

2) $8b$

A) first degree monomial
B) constant binomial
C) first degree trinomial
D) first degree binomial

3) $7x^2 + 2x$

A) first degree trinomial
B) second degree binomial
C) third degree binomial
D) fourth degree monomial

4) $-9x^3 + 8x^2$

A) second degree trinomial
B) first degree trinomial
C) first degree binomial
D) third degree binomial

Simplify each expression by combining like terms. (Add or Subtract)

5) $(2x^2 + 4) + (1 - x^2)$

A) $x^2 + 5$ B) $-9x^2 + 9$
C) $-9x^2 + 5$ D) $-4x^2 + 5$

6) $(3v^2 + 4v^4) - (v^2 - 4v^3)$

A) $7v^4 + 4v^3 - 3v^2$
B) $9v^4 + 4v^3 - 3v^2$
C) $4v^4 + 4v^3 - 3v^2$
D) $4v^4 + 4v^3 + 2v^2$

7) $(8m^3 + 1 + 2m^5) - (7 + 14m^3 + 3m^5)$

A) $-m^5 - 6m^3$
B) $17m^5 - 6m^3$
C) $3m^5 - 6m^3$
D) $-m^5 - 6m^3 - 6$

8) $(-x^2 + 8x^4 - 5) + (-1 - 3x^4 + 2x^2)$

A) $5x^4 + 3x^2 + 2$
B) $5x^4 + x^2 - 6$
C) $5x^4 + x^2 - 12$
D) $5x^4 + 3x^2 - 12$

Find each product.

9) $3n(7n - 1)$

A) $6n + 4$ B) $24n + 30$
C) $21n^2 - 3n$ D) $21n + 35$

10) $(8x + 8)(2x - 5)$

A) $16x^2 - 24x - 40$
B) $64x^2 + 32x + 4$
C) $64x^2 - 4$
D) $64x^2 + 4$

11) $(5n - 8)^2$

A) $25n^2 + 64$
B) $25n^2 - 64$
C) $25n^2 - 80n + 64$
D) $n^2 - 9$

12) $3(4v^2 + 7v - 5)$

A) $12v^2 + 21v - 15$
B) $40v^2 + 35v - 15$
C) $6v^8 - 3v^7 + 15v^6$
D) $20v^2 + 8v + 16$

13) $(6n - 8)(3n^2 - 5n - 4)$

A) $48n^3 - 44n^2 + 54n - 8$
B) $18n^3 - 54n^2 + 16n + 32$
C) $32n^3 - 16n^2 + 58n - 14$
D) $30n^3 - 11n^2 - 41n + 7$

Write in standard form. State the leading coefficient and the constant.

14) $-2p + 3p^2$

15) $1 + x + 2x^4$

Simplify each expression by combining like terms. (Add or Subtract) State your answer in standard form.

16) $(4x + x^4) + (2x - 3x^4)$

17) $(m^4 - m) - (4m + 3m^4)$

Find each product. State your answer in standard form.

18) $(3k + 1)(6k - 2)$

19) $(7v - 5)(7v^2 - 2v + 1)$

20) The sides of a triangle are represented by the expressions
$3x^2 + 4$, $x^2 - 6x$, and $x - 3$.
What is the simplest expression for the perimeter of the triangle?

Answers to Unit 2 Review (ID: 1)

1) A
2) A
3) B
4) D
5) A
6) D
7) D
8) B
9) C
10) A
11) C
12) A
13) B
14) quadratic binomial
15) fourth degree trinomial
16) $-2x^4 + 6x$
17) $-2m^4 - 5m$
18) $18k^2 - 2$
19) $49v^3 - 49v^2 + 17v - 5$
20)