

Name(s) _____

Complete the table for the polynomial.

1) $10x^2 + 3x + 13$

Term	Coefficient
$10x^2$?
?	3
13	?

Find the degree of the following polynomial and determine whether it is a monomial, binomial, trinomial, or none of these.

2) $-13y^5 - 2$

3) $-12y^4 + 9y^3 - 4$

Find the value of the polynomial at the given replacement values.

4) $-2x^2 + 9x + 1$ when $x = -2$

5) $-10 - x^3 - x^2$ when $x = 5$

Simplify the following by combining like terms.

6) $2m^7 + 3m^7$

7) $-7r + 12r^4 - 7r^4 + 10r$

Simplify the polynomial by combining like terms.

8) $14x^2 - 15xy - 19y^2 - 6xy$

Write the polynomial in descending powers of the variable with no missing powers.

9) $x^3 + 8$

10) $8x + 6x^4$

Solve.

- 11) A object is thrown upward with an initial velocity of 25 feet per second from the top of a 528-foot building. The height of the object at any time t can be described by the polynomial $-16t^2 + 25t + 528$. Find the height of the object at $t = 2$ seconds.

Write the perimeter of the figure as a polynomial. Then simplify the polynomial.

12)



$(4x + 10)$ units

$(x^2 - x + 13)$ units

Answer Key

Testname: 12.3WKS

- | | Term | Coefficient |
|----|---------|-------------|
| 1) | $10x^2$ | 10 |
| | $3x$ | 3 |
| | 13 | 13 |
- 2) 5; binomial
- 3) 4; trinomial
- 4) -25
- 5) -160
- 6) $5m^7$
- 7) $3r + 5r^4$
- 8) $14x^2 - 21xy - 19y^2$
- 9) $x^3 + 0x^2 + 0x + 8$
- 10) $6x^4 + 0x^3 + 0x^2 + 8x + 0$
- 11) 514 ft
- 12) $(2x^2 + 6x + 46)$ units