

Monomials and Polynomials Worksheet 1

1. Which of the following is a polynomial and which is simply an algebraic expression?

(a) $3n^2k + \frac{1}{2}mv^2$ Ans: _____

(b) $\frac{2}{b} - 7$ Ans: _____

(c) $y^2 - 3x^{\frac{1}{2}} + 4$ Ans: _____

(d) $7xy^2(3z)$ Ans: _____

2. Identify each of the following expressions as monomial, binomial, trinomial, or polynomial (more than three terms).

(a) $a^2 + b^2$ Ans: _____

(b) $\frac{1}{2}x^2 + x^0 - y$ Ans: _____

(c) $ax^2 - y^2$ Ans: _____

(d) $ak^3 + \frac{a-b}{2} + 14k$ Ans: _____

3. For the polynomial $4x^3 - 7x^2 + \frac{1}{2}x - 2$,

(a) How many terms does it have? Ans: _____

(b) Write down the constant term. Ans: _____

(c) What is the degree of the polynomial? Ans: _____

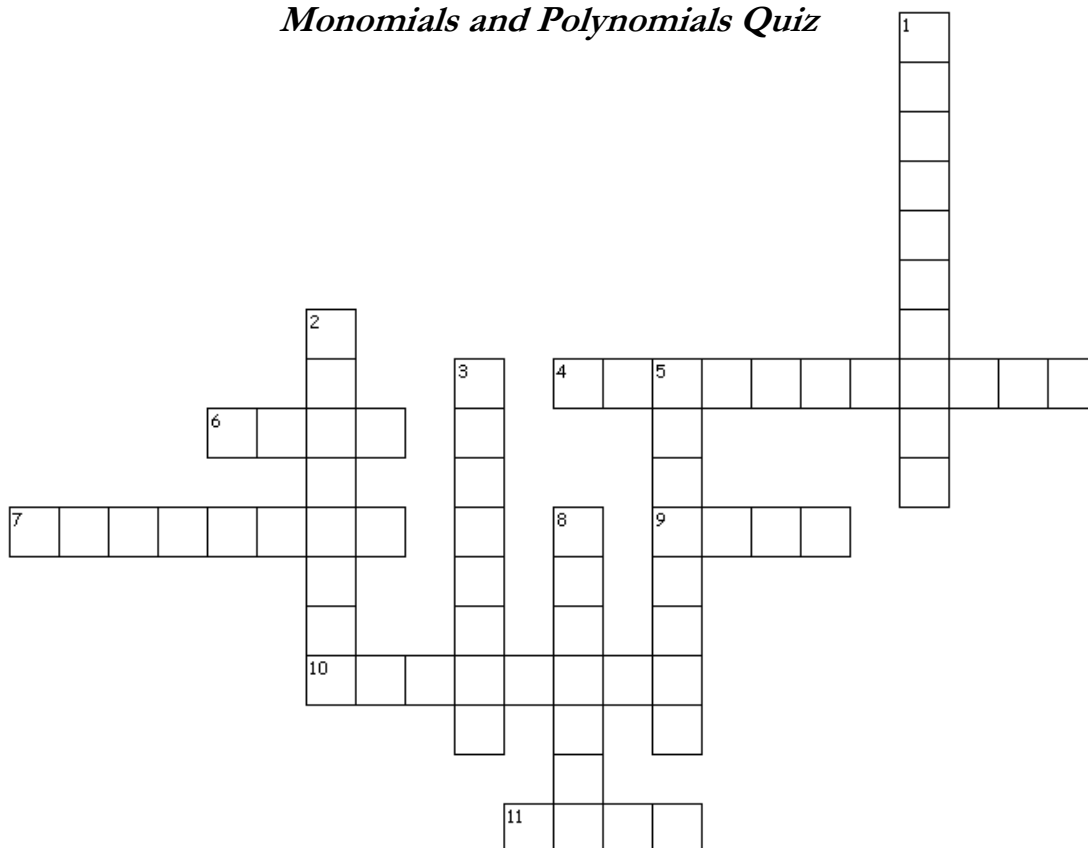
(d) What is the coefficient of x^2 ? Ans: _____

(e) Find its value when $x = 2$. Ans: _____

4. Write down a polynomial in y of degree 4 with fractional coefficients.

Ans: _____

Monomials and Polynomials Quiz



Across

4. A multiplying factor
6. Either a single number or letter or the product of several numbers or letters
7. A single term polynomial
9. ____ terms are terms that contain the same variable or group of variables raised to the same exponent, regardless of their numerical coefficient.
10. ____ are used to shorten or condense repeated multiplication
11. A term that is raised to an exponent

Down

1. An algebraic expression consisting of one or more than one terms, with powers as positive integers
2. A changing quantity
3. A mathematical statement where two expressions are equal.
5. _____ means reducing the expression to a numeric value, or its simplified form
8. A branch of mathematics that uses mathematical statements to describe relationships between things that vary over time.