

5-Minute Check

Transparency 8-4

Express each number in standard notation.

1. 1.0835×10^{-3}

2. 6.716×10^4

BE-18 TUESDAY
10-24-06

Evaluate. Express each result in scientific and standard notation.

3. $(4 \times 10^5)(1.4 \times 10^2)$

4. $\frac{3.28 \times 10^3}{4.0 \times 10^{-1}}$

5. The amount of cargo entering a port in one year was 16,255,000 tons. Write this number in scientific notation.

6. **Standardized Test Practice** A cubic inch is approximately 0.000579 cubic feet. How is this measure expressed in scientific notation?

(A) 5.79×10^{-4}

(B) 57.9×10^{-4}

(C) 57.9×10^{-6}

(D) 579×10^{-6}

ANSWERS

1. 0.0010835

2. 67,160

3. 5.6×10^7 ; 56,000,000

4. 8.2×10^3 ; 8,200

5. 1.6255×10^7

6. A

①

Ch. 8-4 POLYNOMIALS

↓
MANY

POLYNOMIAL A MONOMIAL OR
A SUM OF MONOMIALS
(+, -)

EX $3x$ MONOMIAL AND POLYNOMIAL

$3x + 4$ BINOMIAL AND POLYNOMIAL

$2x^2 + 4x - 6$ TRINOMIAL AND POLYNOMIAL

$3x^3 - 5y + 6a - 8$ POLYNOMIAL

DEGREE OF
A MONOMIAL

THE SUM OF THE
EXponents OF ALL
OF THE VARIABLES

EX) MONOMIAL Degree

x

1

xy

2

x^4y

5

$4abc$

3

$5x^2$

2

8

0

$12x^2y^{-2}$

TRICK!
NOT A
MONOMIAL

degree of A
polynomial

THE SAME DEGREE AS
THE GREATEST MONOMIAL
degree.

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

monomial
Degree 4 3 2 1 0

∴ Polynomial degree is 4

BY CONVENTION, WRITE POLYNOMIALS,
IN ORDER BY DEGREE OF MONOMIALS,

Biggest First: DESCENDING order

ASCEND $\Rightarrow$ OPPOSITE, sometimes used

Pg. 434 # 1-14

HW: Read Ch 8-4

Pg 434 # 15-45 (First
column)