

Division of Polynomials  
02/29/2012

Student Name: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

Instructions: Read each question carefully and select the correct answer.

1. Simplify.

$$\frac{9x^3y + 138x^2y^2 + 264xy^3}{3xy}$$

- A.  $6x^2 + 135xy^2 + 261y^2$
- B.  $6x^3y + 135x^2y^2 + 261xy^3$
- C.  $3x^2 + 46xy^2 + 88y^2$
- D.  $3x^3y + 46x^2y^2 + 88xy^3$

2. Simplify.

$$\frac{18r^3 - 36r^2}{-18r^2}$$

- |    |               |
|----|---------------|
| A. | $-r^5 - 2r^4$ |
| B. | $-r + 2$      |
| C. | $-r^6 - 2$    |
| D. | $r - 2$       |

- A. A
- B. B
- C. C
- D. D

3. Divide  $(36y^4 - y^3 - 3y^2 - 5y)$  by  $(9y - 7)$ .

- A.  $4y^3 + 3y^2 + 2y + 1 + \frac{7}{9y - 7}$
- B.  $-4y^3 - 3y^2 - 2y - 1 - \frac{7}{9y - 7}$
- C.  $-4y^3 - 3y^2 - 2y - 1 + \frac{7}{9y - 7}$
- D.  $4y^3 + 3y^2 + 2y + 1 - \frac{7}{9y - 7}$

4. Divide the monomial.

$$\frac{144s^9}{12s^3}$$

- |    |                  |
|----|------------------|
| A. | $12s^6$          |
| B. | $12^2s^{12}$     |
| C. | $12s^{12}$       |
| D. | $\frac{12}{s^6}$ |

- A. A  
B. B  
C. C  
D. D