3*x* **+** 4*y*

**19.** **BUSINESS** The polynomial *s*3 – 70*s*2 + 1500*s* – 10,800 models the profit a company makes on selling an item at a price *s*. A second item sold at the same price brings in a profit of *s*3 – 30*s*2 + 450*s* – 5000. Write a polynomial that expresses the total profit from the sale of both items.

**14.** $\frac{x + 3x^{4} - 21x^{2}}{x^{3}}$

**12.** $\frac{1}{5}$*y*3 + *y*2 – 9

**Practice**

***Adding and Subtracting Polynomials***

*Glencoe Algebra 1*

Chapter 8

**8**

5*x* **–** *y*

**20.** **GEOMETRY** The measures of two sides of a triangle are given.

If *P* is the perimeter, and *P* = 10*x* + 5*y*, find the measure of
the third side.

**18.** 4*x* + 2*x*5 – 6*x*3 + 2

**17.** 13*x*2 – 5 + 6*x*3 – *x*

**16.** 10*x* – 7 + *x*4 + 4*x*3

**15.** 8*x*2 – 15 + 5*x*5

**Write each polynomial in standard form. Identify the leading coefficient.**

**13.** 6*g*2*h*3*k*

**11.** 7*a*2*b* + 3*b*2 – *a*2*b*

**Determine whether each expression is a polynomial. If it is a polynomial, find the**

**degree and determine whether it is a *monomial, binomial,* or *trinomial.***

**10.** (*w*2 – 4*w* – 1) + (–5 + 5*w*2 – 3*w*)

**9.** (4*y*2 + 2*y* – 8) – (7*y*2 + 4 – *y*)

**8.** (6*x*2 – *x* + 1) – (–4 + 2*x*2 + 8*x*)

**7.** (*x*3 – 3*x* + 1) – (*x*3 + 7 – 12*x*)

**6.** (–4*p*2 – *p* + 9) + ( *p*2 + 3*p* – 1)

**5.** (5*a*2 + 6*a* + 2) – (7*a*2 – 7*a* + 5)

**4.** (2*m*2 + 6*m*) + (*m*2 – 5*m* + 7)

**3.** (4*k*2 + 8*k* + 2) – (2*k* + 3)

**2.** (–*x*2 + 3*x*) – (5*x* + 2*x*2)

**1.** (4*y* + 5) + (–7*y* – 1)

**Find each sum or difference.**

**8-1**

NAME DATE PERIOD



