7.5 Pg. 479
Algebra Daily Practice

Find the degree of each monomial.

4. 10^6 **5.** $-7xy^2$ **6.** $0.4n^6$ **7.** 2

Find the degree of each polynomial.

8. $x^2 - 2x + 1$ **9.** $0.75a^2b - 2a^3b^5$ **10.** $15y - 84y^3 + 100 - 3y^2$

11. $r^3 + r^2 - 5$ **12.** $a^3 + a^2 - 2a$ **13.** $3k^4 + k^3 - 2k^2 + k$

Write each polynomial in standard form. Then give the leading coefficient.

14. $-2b + 5 + b^2$ **15.** $9a^8 - 8a^9$ **16.** $5s^2 - 3s + 3 - s^7$

17. $2x + 3x^2 - 1$ **18.** $5g - 7 + g^2$ **19.** $3c^2 + 5c^4 + 5c^3 - 4$

Classify each polynomial according to its degree and number of terms.
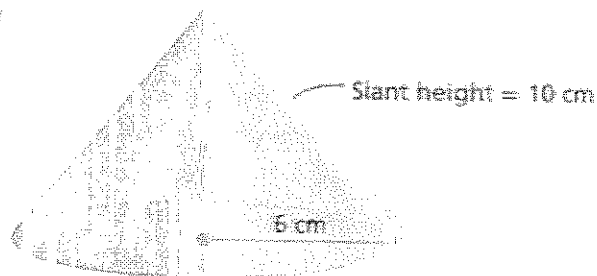
20. $x^2 + 2x + 3$ **21.** $x - 7$ **22.** $8 + k + 5k^4$

23. $q^2 + 6 - q^3 + 3q^4$ **24.** $5k^2 + 7k^3$ **25.** $2a^3 + 4a^2 - a^4$

26. Geometry The surface area of a cone
is approximated by the polynomial
$3.14r^2 + 3.14r\ell$, where r is the radius
and ℓ is the slant height. Find the
approximate surface area of
this cone.

Slant height = 10 cm

6 cm

1

7.6A - Pg. 487

Add or subtract.

1. $7a^2 - 10a^2 + 9a$

2. $13x^2 + 9y^2 - 6x^2$

3. $0.07r^4 + 0.32r^3 + 0.19r^4$

4. $\frac{1}{4}p^3 + \frac{2}{3}p^3$

5. $5b^3c + b^3c - 3b^3c$

6. $-8m + 5 - 16 + 11m$

Add.

7. $(5n^3 + 3n + 6) + (18n^3 + 9)$

8. $(3.7q^2 - 8q + 3.7) + (4.3q^2 - 2.9q + 1.6)$

9. $(-3x + 12) + (9x^2 + 2x - 18)$

10. $(9x^4 + x^3) + (2x^4 + 6x^3 - 8x^4 + x^3)$

Add.

25. $(2t^2 - 8t) + (8t^2 + 9t)$

26. $(-7x^2 - 2x + 3) + (4x^2 - 9x)$

27. $(x^5 - x) + (x^4 + x)$

28. $(-2z^3 + z + 2z^3 + z) + (3z^3 - 5z^2)$

34. **Geometry** The length of a rectangle is represented by $4a + 3b$, and its width is represented by $7a - 2b$. Write a polynomial for the perimeter of the rectangle.