

## Algebra 12-2 Common Monomial Factoring

In 1-5 find the Greatest Common Factor.

1.  $20x$  and  $30x$  \_\_\_\_\_
2.  $5x^3$  and  $15x^2$  \_\_\_\_\_
3.  $6n^4$  and  $9n^7$  \_\_\_\_\_
4.  $16a^2b^4$  and  $24ab^6$  \_\_\_\_\_
5.  $15a^4$  and  $20a^3$  and  $25a^6$  \_\_\_\_\_

Factor the polynomial completely.

6.  $16a^2 + 20a =$  \_\_\_\_\_
7.  $7a^4 + 14a^2 =$  \_\_\_\_\_
8.  $3n^4 - 6n^7 =$  \_\_\_\_\_
9.  $2a^2b^3 + 4ab^5 =$  \_\_\_\_\_
10.  $11a^7b^2 + 22a^4b^5 =$  \_\_\_\_\_
11.  $15a^4b^2c^5 - 20a^2bc^7 =$  \_\_\_\_\_
12.  $5n^4 + 15n^2 + 15n^3 =$  \_\_\_\_\_
13.  $6y^3b^2 - 2yb^3 + 12y^2b^2 =$  \_\_\_\_\_

Simplify the fraction.

14.  $\frac{4n^2 + 6n^4}{2n^2} =$
15.  $\frac{5n^3 - 15n^4}{5n^3} =$
16.  $\frac{n^6 - n^5 + n^4}{n^2} =$
17.  $\frac{6y^2 - 9y}{3y} =$