

## 6-2 Multiplying Monomials

Multiply. Write your answer in simplest form.

1)  $2 \cdot x$

2)  $y \cdot 4x$

3)  $3x \cdot 3x$

4)  $1 \cdot 7y$

Find each product.

5)  $3(3x + 2)$

6)  $4(x - 2)$

7)  $4(3k - 2)$

8)  $3(4x + 2)$

9)  $5y^2(2x + y)$

10)  $5(5m - 2n)$

11)  $2x(5x - 2y)$

12)  $3b(4a + 5b)$

13)  $2a(-2a^2 + 4ab - 3b^2)$

14)  $-3(x^2 + 4xy + 5y^2)$

15)  $7(-3x^2 + 4xy + y^2)$

16)  $-2n^2(-3m^2 - 8mn - 4n^2)$

Name each polynomial by degree and number of terms.

17)  $-10n^4$

18)  $7b^4 - 5b^2 - 3$

19) Write an example of a monomial of the fourth degree.

20) Write an example of a quadratic trinomial.

Simplify.

21)  $3xx^3$

22)  $2x \cdot 2x$

Simplify. Your answer should contain only positive exponents with no fractional exponents in the denominator.

23)  $2m^{\frac{3}{2}} \cdot 3m^{\frac{2}{3}}$

24)  $2r^{\frac{5}{3}} \cdot 2r^{-\frac{5}{3}}$