

## 1.5 Simplify

Date \_\_\_\_\_ Period \_\_\_\_\_

**Write each expression in exponential form.**

1)  $(\sqrt[5]{3m})^6$

2)  $(\sqrt[5]{m})^8$

**Write each expression in radical form.**

3)  $(7k)^{\frac{1}{2}}$

4)  $(7b)^{\frac{5}{3}}$

**Simplify.**

5)  $\sqrt{100n}$

6)  $\sqrt[3]{320m^4}$

7)  $\sqrt[4]{64a^4}$

8)  $\sqrt{16n}$

$$9) 6\sqrt[4]{48k^3}$$

$$10) 3\sqrt{98v}$$

$$11) (64x^4)^{\frac{1}{2}}$$

$$12) (r^8)^{\frac{3}{2}}$$

$$13) (16v^6)^{\frac{3}{2}}$$

$$14) (64n^4)^{\frac{3}{2}}$$

$$15) (r^{10})^{\frac{2}{5}}$$

$$16) (36n^2)^{\frac{3}{2}}$$