8.2 Key Concepts 1 Exponent Rule When Multiplying Worked Example

Example: Simplify $m^5 \times m^2$.

Solution: When multiplying powers with the same base, add the exponents, and keep the base the same.

$$m^5 \times m^2 = m^{5+2}$$
$$= m^7$$

Practice:

1. Simplify $8^3 \times 8^2$ by writing as a single power.

2. Simplify $a^{11} \times a^4$.

Answers: 1. 8^5 2. a^{15}