

# Powers of Exponents (H)

Simplify each expression.

1.  $(2^3)^2$

2.  $(3^4)^5$

3.  $(6^8)^4$

4.  $(7^1)^8$

5.  $(3^0)^2$

6.  $(8^5)^5$

7.  $(8^1)^0$

8.  $(8^9)^1$

9.  $(6^0)^7$

10.  $(2^2)^4$

# Powers of Exponents (H) Answers

Simplify each expression.

1.  $(2^3)^2$

$$= 2^6$$

2.  $(3^4)^5$

$$= 3^{20}$$

3.  $(6^8)^4$

$$= 6^{32}$$

4.  $(7^1)^8$

$$= 7^8$$

5.  $(3^0)^2$

$$= 3^0 = 1$$

6.  $(8^5)^5$

$$= 8^{25}$$

7.  $(8^1)^0$

$$= 8^0 = 1$$

8.  $(8^9)^1$

$$= 8^9$$

9.  $(6^0)^7$

$$= 6^0 = 1$$

10.  $(2^2)^4$

$$= 2^8$$