

Powers of Exponents (A)

Simplify each expression.

1. $(9^4)^2$

2. $(3^9)^9$

3. $(4^4)^3$

4. $(8^2)^6$

5. $(3^1)^7$

6. $(4^6)^8$

7. $(8^1)^2$

8. $(7^0)^3$

9. $(6^1)^0$

10. $(2^6)^7$

Powers of Exponents (A) Answers

Simplify each expression.

1. $(9^4)^2$

$$= 9^8$$

2. $(3^9)^9$

$$= 3^{81}$$

3. $(4^4)^3$

$$= 4^{12}$$

4. $(8^2)^6$

$$= 8^{12}$$

5. $(3^1)^7$

$$= 3^7$$

6. $(4^6)^8$

$$= 4^{48}$$

7. $(8^1)^2$

$$= 8^2$$

8. $(7^0)^3$

$$= 7^0 = 1$$

9. $(6^1)^0$

$$= 6^0 = 1$$

10. $(2^6)^7$

$$= 2^{42}$$