Exponent Rules (C)

Simplify each expression.

1. $\dfrac{8^{1}}{8^{6}}$

2. $\dfrac{(-3)^{0}}{(-3)^{-6}}$

3. $(-8)^{-7} \cdot (-9)^{-7}$

4. $(-4)^{-5} \cdot (-4)^{-2}$

5. $((-8)^{-8})^{0}$

6. $((-3)^{-3})^{2}$

7. $\dfrac{5^{2}}{5^{5}}$

8. $\dfrac{(-5)^{-8}}{(-5)^{-8}}$

9. $2^{-7} \cdot 2^{9}$

10. $(-5)^{0} \cdot (-7)^{0}$

Exponent Rules (C) Answers

Simplify each expression.

1. $\dfrac{8^{1}}{8^{6}}$

$= 8^{-5} = \dfrac{1}{8^{5}}$

2. $\dfrac{(-3)^{0}}{(-3)^{-6}}$

$= (-3)^{6}$

3. $(-8)^{-7} \cdot (-9)^{-7}$

$= 72^{-7} = \dfrac{1}{72^{7}}$

4. $(-4)^{-5} \cdot (-4)^{-2}$

$= (-4)^{-7} = \dfrac{1}{(-4)^{7}}$

5. $((-8)^{-8})^{0}$

$= (-8)^{0} = 1$

6. $((-3)^{-3})^{2}$

$= (-3)^{-6} = \dfrac{1}{(-3)^{6}}$

7. $\dfrac{5^{2}}{5^{5}}$

$= 5^{-3} = \dfrac{1}{5^{3}}$

8. $\dfrac{(-5)^{-8}}{(-5)^{-8}}$

$= (-5)^{0} = 1$

9. $2^{-7} \cdot 2^{9}$

$= 2^{2}$

10. $(-5)^{0} \cdot (-7)^{0}$

$= 35^{0} = 1$