

Name _____

Common Core Standard 8.EE.A.1 – Expressions and Equations

Write the following in the exponent form: $4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4$. Be sure to show your work.

A 4^6

B 4^5

C 4^7

D 4^8

Common Core Standard 8.EE.A.1 – Expressions and Equations

Write the expanded form for the following exponent: $\left(-\frac{2}{3}\right)^4$. Be sure to show your work.

A $-\frac{2^4}{3}$

B $\left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right)$

C $-\left(\frac{2}{3} \times \frac{2}{3} \times \frac{2}{3} \times \frac{2}{3}\right)$

D $\left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right)$

Common Core Standard 8.EE.A.1 – Expressions and Equations

Which option below is equivalent to $6^4 \times 7^{-2}$? Be sure to show your work.

A $6 \times 6 \times 6 \times 6 \times (-7) \times (-7)$

B $6 \times 6 \times 6 \times 6 \times 7 \times 7$

C $6 \times 6 \times 6 \times 6 \times \left(-\frac{1}{7}\right) \times \left(-\frac{1}{7}\right)$

D $6 \times 6 \times 6 \times 6 \times \frac{1}{7} \times \frac{1}{7}$

Name _____

Common Core Standard 8.EE.A.1 – Expressions and Equations

 Evaluate the exponent $(-10)^1$. Be sure to show your work.

A -10

B 10

C $\frac{1}{10}$

D $-\frac{1}{10}$

Common Core Standard 8.EE.A.1 – Expressions and Equations

 Evaluate the exponent $(-0.3)^3$. Be sure to show your work.

A 0.027

B -0.027

C -0.127

D 0.27

Common Core Standard 8.EE.A.1 – Expressions and Equations

 Evaluate the exponent 0.5^4 . Be sure to show your work.

A 0.625

B 0.0625

C 0.225

D 0.0225

Name _____

Common Core Standard 8.EE.A.1 – Expressions and Equations

- Write the following in the exponent form: $13 \times 13 \times 13 \times 13 \times \frac{1}{11} \times \frac{1}{11} \times \frac{1}{11}$.
Be sure to show your work.

A $13^4 \times \left(-\frac{1}{11}\right)$

B $13^4 \times (-11)^3$

C $13^5 - \frac{1}{11}^3$

D $13^4 \times 11^{-3}$

Common Core Standard 8.EE.A.1 – Expressions and Equations

- Evaluate the exponential expression $17^6 \times 17^{-4}$. Be sure to show your work.

A 4913

B 289

C 17

D $\frac{1}{49}$

Common Core Standard 8.EE.A.1 – Expressions and Equations

- Evaluate the exponential expression $\left(\frac{-5}{2}\right)^{-2}$. Be sure to show your work.

A $\frac{25}{4}$

B $\frac{4}{25}$

C 0.25

D $\frac{4}{25}$

Name _____

Common Core Standard 8.EE.A.1 – Expressions and Equations

 Evaluate the exponential expression. Be sure to show your work.

$$52^{-5} \times 52^6 - 4^2 =$$

A 44

B -60

C 36

D $\frac{4}{13}$

Common Core Standard 8.EE.A.1 – Expressions and Equations

 Evaluate the exponential expression. Be sure to show your work.

$$9^2 + 44^8 \times 44^{-7} = \square$$

A 125

B 37

C $\frac{18}{44}$

D 62

Common Core Standard 8.EE.A.1 – Expressions and Equations

 Evaluate the exponential expression. Be sure to show your work.

$$(-2.1)^2 + 2^2 = \square$$

A -0.2

B -0.41

C 8.41

D 0.41