

Name : _____

Standard Form & Exponential Form

A) Write the following numerals in expanded form and standard form.

S.No	Exponential Form	Expanded Form	Standard Form
1)	$\left(-\frac{3}{7}\right)^3$		
2)	$\left(\frac{4}{5}\right)^5$		
3)	$\left(-\frac{9}{4}\right)^4$		
4)	$\left(\frac{1}{8}\right)^3$		

B) Write the following numerals in exponential form.

S.No	Standard Form	Exponential Form
1)	$\frac{625}{81}$	
2)	$-\frac{1}{7,776}$	
3)	$\frac{49}{64}$	
4)	$-\frac{2,187}{12}$	

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C) Write the following numerals in exponential form using prime factorization.

1) $-\frac{1}{243} =$ _____

2) $-\frac{1}{3,125} =$ _____

3) $\frac{1}{289} =$ _____

4) $\frac{125}{8} =$ _____

Name : _____

Standard Form & Exponential Form

A) Write the following numerals in expanded form and standard form.

S.No	Exponential Form	Expanded Form	Standard Form
1)	$\left(-\frac{3}{7}\right)^3$	$\left(-\frac{3}{7}\right) \cdot \left(-\frac{3}{7}\right) \cdot \left(-\frac{3}{7}\right)$	$-\frac{27}{343}$
2)	$\left(\frac{4}{5}\right)^5$	$\frac{4}{5} \cdot \frac{4}{5} \cdot \frac{4}{5} \cdot \frac{4}{5} \cdot \frac{4}{5}$	$\frac{1,024}{3,125}$
3)	$\left(-\frac{9}{4}\right)^4$	$\left(-\frac{9}{4}\right) \cdot \left(-\frac{9}{4}\right) \cdot \left(-\frac{9}{4}\right) \cdot \left(-\frac{9}{4}\right)$	$\frac{6,561}{256}$
4)	$\left(\frac{1}{8}\right)^3$		$\frac{1}{512}$

B) Write the following numerals in exponential form.

S.No	Standard Form	Exponential Form
1)	$\frac{625}{81}$	$\left(\frac{5}{3}\right)^4$
2)	$-\frac{1}{7,776}$	$\left(-\frac{1}{6}\right)^5$
3)	$\frac{49}{64}$	$\left(\frac{7}{8}\right)^2$
4)	$-\frac{2,187}{128}$	$\left(-\frac{3}{2}\right)^7$

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C) Write the following numerals in exponential form using prime factorization.

1) $-\frac{1}{243} = \underline{\left(-\frac{1}{3}\right)^5 \text{ or } (-3)^{-5}}$ 2) $-\frac{1}{3,125} = \underline{\left(-\frac{1}{5}\right)^5 \text{ or } (-5)^{-5}}$

3) $\frac{1}{289} = \underline{\left(\frac{1}{17}\right)^2 \text{ or } 17^{-2}}$ 4) $\frac{125}{8} = \underline{\left(\frac{5}{2}\right)^3}$