

Name Key
Mrs. Roubos

Rules: multiply = Add exponents
Divide = Subtract exponents
Power to a power = multiply exponents

Date _____
8R Period _____

<p>1) Which shows 5^4 in standard form?</p> <p>A) 20 <input checked="" type="radio"/> B) 625 C) 1,204 D) 3,125</p> <p>$5 \times 5 \times 5 \times 5$</p>	<p>2) Which is $6^3 \cdot 6^4$ in exponential form?</p> <p>A) 36^{12} B) 7^6 C) 6^{12} <input checked="" type="radio"/> D) 6^7</p> <p>$6^{3+4} = 6^7$</p>
<p>3) Which shows 9^{-3} in standard form?</p> <p>A) 729 B) 27 C) $\frac{1}{27}$ <input checked="" type="radio"/> D) $\frac{1}{729}$</p> <p>$9^{-3} = \frac{1}{9^3} = \frac{1}{729}$</p>	<p>4) Which shows $(11^6)^2$ in exponential form?</p> <p>A) 22^6 <input checked="" type="radio"/> B) 11^{12} C) 11^8 D) 11^4</p> <p>$11^{6 \cdot 2} = 11^{12}$</p>
<p>5) Which shows $4^6 \div 4^5$ in standard form?</p> <p>A) 0 <input checked="" type="radio"/> B) 1 C) 4 D) 16</p> <p>$4^{6-5} = 4^1 = 4$</p>	<p>6) Which shows $2^{-2} \cdot 2^6$ in exponential form?</p> <p><input checked="" type="radio"/> A) 2^4 B) 2^{-4} C) 2^{-8} D) 2^{-12}</p> <p>$2^{-2+6} = 2^4$</p>
<p>7) Which shows $(2^2)^{-2}$ in standard form?</p> <p>A) 0 <input checked="" type="radio"/> B) $\frac{1}{16}$ C) $\frac{1}{8}$ D) 1</p> <p>$2^{2 \cdot -2} = 2^{-4} = \frac{1}{2^4} = \frac{1}{16}$</p>	<p>8) Which shows $6^{-1} \div 6^{-4}$ in exponential form?</p> <p>A) 6^{-5} B) 6^{-3} C) 6^1 <input checked="" type="radio"/> D) 6^3</p> <p>$6^{-1 - (-4)} = 6^3$</p>
<p>9) Add exponents</p> <p>A) $5^4 \cdot 5^4 = 5^8$</p> <p>B) $5^6 \div 5^3 = 5^3$</p>	<p>10) Circle every expression that is equivalent to 7^8</p> <p>A) $7^2 \cdot 7^4 = 7^{2+4} = 7^6$</p> <p><input checked="" type="radio"/> B) $7^4 \cdot 7^4 = 7^{4+4} = 7^8$</p> <p>C) $7^8 \div 7^1 = 7^{8-1} = 7^7$</p> <p><input checked="" type="radio"/> D) $(7^2)^4 = 7^{2 \cdot 4} = 7^8$</p> <p>E) $(7^4)^4 = 7^{4 \cdot 4} = 7^{16}$</p> <p>Equal</p>