

Name key

Date _____

Mrs. Roubos

8R Period _____

Algebra Mixed Review

<p>1) Simplify the expression: $3x + 2x$</p> <p>#Combine like terms</p> <p>$5x$</p>	<p>2) Simplify the expression $7v + 2 + 12 + 2v$</p> <p>*Combine like terms</p> <p>$9v + 14$</p>
<p>3) Simplify: $3a + 5b$ if $a = 4$ and $b = 6$</p> <p>$3(4) + 5(6)$</p> <p>12 + 30</p> <p>42</p> <p>P E M/D → A/S →</p>	<p>4) Simplify: $2(y + 4)$ if $y = 7$</p> <p>$2(7 + 4)$</p> <p>$2(11)$</p> <p>22</p> <p>Problem in () E M/D → A/S →</p>
<p>5) Is $x + y$ and expression or an equation?</p> <p>a) Expression → Does <u>NOT</u> have an = sign</p> <p>b) Equation</p>	<p>6) Is $x + y = 50$ an expression or an equation?</p> <p>a) Expression</p> <p>b) Equation → Does have an equal sign</p>
<p>7) Which one of the following is the variable of: $2d - 6$</p> <p>a) 2d</p> <p>b) 2</p> <p>c) d</p> <p>d) 6</p> <p>variable ↓ letter</p>	<p>8) Which one of the following is the coefficient of: $10y + 4$ → constant</p> <p>a) y</p> <p>b) 10</p> <p>c) 4</p> <p>d) 10 and 4</p> <p>the # with the variable</p>
<p>9) How many terms are there in the following expression: $5x + 3y - 15$</p> <p>a) 1</p> <p>b) 2</p> <p>c) 3</p> <p>d) 4</p> <p>$5x, 3y$ and -15 are the 3 terms</p>	<p>10) Solve for x:</p> <p>$\frac{2x}{2} = \frac{12}{2}$</p> <p>$x = 6$</p> <p>C M S</p>

<p>11) Solve for x:</p> $x - 7 = 12$ $\begin{array}{r} x - 7 = 12 \\ +7 \quad +7 \\ \hline \end{array}$ $x = 19$ <p>C M S</p>	<p>12) Solve for x:</p> $\left(\frac{3}{2}\right)\left(\frac{2}{3}x\right) = 10\left(\frac{3}{2}\right)$ $x = 15$ <p>C M S</p>
<p>13) Solve for x:</p> $2x + 1 = 5$ $\begin{array}{r} 2x + 1 = 5 \\ -1 \quad -1 \\ \hline \end{array}$ $\frac{2x}{2} = \frac{4}{2}$ $x = 2$ <p>C M S</p>	<p>14) Solve for r:</p> $27 = 5r + 2$ $\begin{array}{r} 27 = 5r + 2 \\ -2 \quad -2 \\ \hline \end{array}$ $\frac{25}{5} = \frac{5r}{5}$ $5 = r$ <p>C M S</p>
<p>15) Solve for x:</p> $4x + 7 = 23$ $\begin{array}{r} 4x + 7 = 23 \\ -7 \quad -7 \\ \hline \end{array}$ $\frac{4x}{4} = \frac{16}{4}$ $x = 4$ <p>C M S</p>	<p>16) Solve for b:</p> $3b + 6b = 63$ <p>CLT More variable Solve</p> <p>* Combine 1st</p> $\frac{9b}{9} = \frac{63}{9}$ $b = 7$ <p>C M S</p>
<p>17) Solve for x:</p> $7x - 3x - 8 = 24$ <p>* Combine 1st</p> $4x - 8 = 24$ $\begin{array}{r} 4x - 8 = 24 \\ +8 \quad +8 \\ \hline \end{array}$ $\frac{4x}{4} = \frac{32}{4}$ $x = 8$ <p>C M S</p>	<p>18) Solve for a:</p> $15 + 4a - 6 = 21$ <p>* Combine 1st</p> $9 + 4a = 21$ $\begin{array}{r} 9 + 4a = 21 \\ -9 \quad -9 \\ \hline \end{array}$ $\frac{4a}{4} = \frac{12}{4}$ $a = 3$ <p>C M S</p>
<p>19) Solve for x:</p> $10x + 9 = 4x - 9$ $\begin{array}{r} 10x + 9 = 4x - 9 \\ -4x \quad -4x \\ \hline \end{array}$ $6x + 9 = -9$ $\begin{array}{r} 6x + 9 = -9 \\ -9 \quad -9 \\ \hline \end{array}$ $\frac{6x}{6} = \frac{-18}{6}$ $x = -3$ <p>* Move smaller variable to larger</p> <p>C M S</p>	<p>20) Solve for w:</p> $7w + 5 = 3w - 15$ $\begin{array}{r} 7w + 5 = 3w - 15 \\ -3w \quad -3w \\ \hline \end{array}$ $4w + 5 = -15$ $\begin{array}{r} 4w + 5 = -15 \\ -5 \quad -5 \\ \hline \end{array}$ $\frac{4w}{4} = \frac{-20}{4}$ $w = -5$ <p>* Move smaller variable to larger</p> <p>C M S</p>