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| 1. Let *x*, *y*, and *z* represent three real numbers. Write an algebraic expression to denote the product of *z*, *x*, and *y*.   |  |  |  | | --- | --- | --- | |  | a. |  | |  | b. |  | |  | c. |  | |  | d. |  | |  | e. |  |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 2. Let *y* =  and *z =* . Write the phrase as an algebraic expression, and evaluate it.  *z* less than *y*   |  |  |  | | --- | --- | --- | |  | a. |  | |  | b. |  | |  | c. |  | |  | d. |  | |  | e. |  |  |  |  | | --- | --- | | *ANSWER:* | b | |

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| 3. Fill in the blanks to write the algebraic expression as a phrase.  3*x*   The \_\_\_\_\_\_\_\_\_\_(product/quotient/sum/difference) obtained when the \_\_\_\_\_\_\_\_\_\_(product of *x* and 3/quotient of *x* and 3/cube of *x*) is divided by the \_\_\_\_\_\_\_\_\_\_(product of *y* and *z*/quotient of *y* and *z*/sum of *y* and *z*/difference of *y* and *z*).   |  |  | | --- | --- | | *ANSWER:* | quotient; product of x and 3; sum of y and z | |

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| 4. Evaluate the algebraic expression for the given values of the variables.  9(*x* - 4) - 5(*x* + 9), *x* = 4   |  |  |  | | --- | --- | --- | |  | a. | 7 | |  | b. | 25 | |  | c. | –75 | |  | d. | –65 | |  | e. | 16 |  |  |  | | --- | --- | | *ANSWER:* | d | |

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| 5. Evaluate the algebraic expression for the given value of the variable.   |  |  |  | | --- | --- | --- | |  | a. |  | |  | b. |  | |  | c. |  | |  | d. |  | |  | e. |  |  |  |  | | --- | --- | | *ANSWER:* | a | |

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| 6. If , , and , evaluate the expression.   |  |  |  | | --- | --- | --- | |  | a. |  | |  | b. |  | |  | c. |  | |  | d. |  | |  | e. |  |  |  |  | | --- | --- | | *ANSWER:* | d | |

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| 7. Give the number of terms in the algebraic expression and also give the numerical coefficient of the second term.    –3*a* + 30*b*   |  |  |  | | --- | --- | --- | |  | a. | 2; 30 | |  | b. | 2; –3 | |  | c. | 2; *a* | |  | d. | 2; *b* |  |  |  | | --- | --- | | *ANSWER:* | a | |

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| 8. Give the number of terms in the algebraic expression and also give the numerical coefficient of the third term.    2*xyz* - 10*xy* - 49*yz*   |  |  |  | | --- | --- | --- | |  | a. | 3; -2 | |  | b. | 3; -49 | |  | c. | 3; 2 | |  | d. | 3; 10 |  |  |  | | --- | --- | | *ANSWER:* | b | |

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| 9. Give the number of terms in the algebraic expression and also give the numerical coefficient of the first term.    –11*ab*     |  |  |  | | --- | --- | --- | |  | a. | 1; 0 | |  | b. | 1; 11 | |  | c. | 1; *ab* | |  | d. | 1; –11 |  |  |  | | --- | --- | | *ANSWER:* | d | |