**Module 1:**

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| 1.  | Evaluate:  when x = 4 and y = -6 |
| 2.  | Which equation is equivalent to $4x-3\left(2x-5\right)=16x$ ? |
|  A. $-2x+15=16x$ B. $-2x-15=16x$ C. $-2x+5=16x$ D. $-2x-5=16x$ |
| 3. | Solve for x: $2\left(x-4\right)-4=3(x+7)$ |   |
| 4.  | The total cost (c) in dollars of renting a sod cutter for n days is given by the equation. If the total cost of renting the cutter is $440, for how many days was the cutter rented? |
| 5.  | Solve  |   |
| 6.  | Solve $\frac{9}{3}=\frac{8x-6}{6}$ |

**Module 2**

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| 7.  | Solve: 5 – 4x < 15 |
| 8. | Solve: $3\left(x-4\right)+5x>2x$  |
| 9. | Solve and graph the solution to -4x-8>20 |
| 10. | The cost to rent a car is $30 per day plus $40 to fill up the gas tank. Write an inequality to represent the number of days that the car can be rented if the cost is not to exceed $250. |
| 11. | Solve -10 < 5x +5 < -5 |

**Module 3**

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| 12. | State the domain and range of the following set: (1, 2), (3, 3), (5,2), (1, 1) |
| 13. | Is the following relation a function? Explain{(1,2), (2, 1), (3, 1), (-2, -1) } |
| 14. | Is this a function? Explain.  | 15. Is this a function? Explain.[image] |
| 16-17 | Graph y = 2x- 3A1_MTXEAR361614_123T | Graph y = - 2/3x +2 A1_MTXEAR361614_123T | Graph x = 4A1_MTXEAR361614_123T |

**Module 5**

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| 18. | Is this a linear function? Explain

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| X | 2 | 4 | 6 | 10 |
| Y | -1 | 0 | 1 | 3 |

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| 19. | Mr. G opens a Grillz(diamond mouth pieces) store and makes $10,000.00 for each grill he sells. Write an equation representing the money Mr. G makes from selling each Grill. Is the function discrete or continuous? Explain |
| 20. | Find the slope between the two points: (-2, -4) and (2, -1) |
| 21. | Find the x and y intercept[image] |
| 22. | None |
| 23. | Find the x and y-intercept of -3x + 9y =27  |
| 24. | Find the slope of the line below[image] |

**Module 6**

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| 25. | Rewrite 3x -9y = 27 into slope intercept form |
| 26. | Which point lies on the line ? (which makes a true statement) |
|  a. (1, 2) b. (3, 4) c. (0, 8) d. (12, 0) |
| 27.  | Write an equation in slope intercept form that has a slope=-1 and goes through the point (5, 3) |
| 28. | Write an equation in slope intercept form that goes through the points (2, -1) and (7, 9) |

**Module 7**

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| 29. | Sylvia has $35,000 in her bank account. However she has to pay 7,000 per month for her Lamborghini. Write a function representing Sylvia’s Bank Account after x amount of months. When will her bank account reach zero? |
| 30.  | A movie theater sells tickets to see star wars for $12. The theater also sells Blue Raspberry ICEE’s for $3.00. The theater needs to make $1700. Write an equation that represents the situation. |
| 31. | Taylor Swift is in need of an electrician. Electrician A is offering his service for an initial fee of $50 and $12 per hour. Electrician B is offering his service for an initial fee of $32 and $15 per hour. When will the two electricians charge the same amount? |
| 32. | [image] | Which inequality is shown on the graph?A. B. C. D.  |
| 33. | Which inequality does the shaded region represent?[image] | a.  b. c. d.    |

**Module 11**

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| 34. | Solve the system $\left\{\begin{array}{c}y=-3x-3\\-2x+y=7\end{array}\right.$ |
| 35.  | Solve the system $\left\{\begin{array}{c}3x+2y=5\\x+2y=-1\end{array}\right.$ |
| 36. | Solve the system $\left\{\begin{array}{c}x+2y=-2\\x+y=-4\end{array}\right.$ |
| 37. | Solve the system $\left\{\begin{array}{c}5x-2y=11\\3x+5y=19\end{array}\right.$ |
| 38-40 | No |

**Module 12**

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| 41. | Chef G spent $371 on a total of 89 apples and bananas. Each apple costs $5, and each banana costs $3. How many apples and how many bananas did he buy? |
| 42. | Is the ordered pair (1,1) a solution of $\left\{\begin{array}{c}x+y>1\\y<2x-1\end{array}\right.$ |
| 43. | No |
| 44. |

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| Which graph best represents the solution of the system of inequalities shown?  |
|  | b. |  |
|  | d. |  |

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**Open Ended:**

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| 1. Write an equation for the following situation and solve it: **electrician A charges a fee of $5 and $200 per hour.  electrician B charges a fee of $55 and $100 per hour.  After how many hours will the costs be the same?  What will the cost be?**  |
| 2. Cab ride cost a onetime fee of $2.5 and 5 per mile , a) Write the linear functionb) Graph the linear functionc) Estimate how much the the cab will cost if the cab ride is 5 miles. |  |
| 3. Solve the system by graphing.$ \left\{\begin{array}{c}x+2y\leq 6\\ y\leq \frac{1}{2}x-3 \end{array}\right.$ A1_MTXEAR361614_123T | 4. Solve the system by graphing.$ \left\{\begin{array}{c}x+2y=6\\ y=\frac{1}{2}x-3 \end{array}\right.$ A1_MTXEAR361614_123T |
| 5. Solve by addition or subtraction.$$ \left\{\begin{array}{c}-3x+2y=17\\ x+2y=5\end{array}\right.$$ | 6. Solve the system by multiplying first, then using addition or subtraction.$$ \left\{ \begin{array}{c} x+2y=-1 \\3x-4y=17 \end{array}\right.$$ |