Chapter 1: Solve and Apply Equations and Inequalities

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| 1. | 2. |
| 3.  | 4. |
| 5. | 6. |
| 7. | 8. |
| 9. Admission into the fair is $12 and it costs $1.75 for each ride. If you have $30, how many rides can you go on? Write an inequality and solve. |

Chapter 2: Investigate Functions and Linear Applications

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| 1. Is it a function? Yes or No

  | 1. Is it a function? Yes or No

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| 3. Is it a function? Yes or NoDomain: Range:  | 4. Is it a function? Yes or NoDomain: Range:  |
| 5. Is it a function? Yes or NoDomain: Range:  | 6. Is it a function? Yes or No(1, -2) (0, 0) (1, 2) (3, 5) (4, 7)Domain: Range:  |
| 7. If  and , find the following: a)  b)  c)  |
| 8. Write the equation of a line that is parallel to y = 2x – 6 and passes through the point (5, -3)Point Slope Form:Slope Intercept Form:Standard Form: |
| 9. Write the equation of a line that is perpendicular to y = 3x +1 and passes through the point (-6, -2).Point Slope Form:Slope Intercept Form:Standard Form: |
| 10. An ant is climbing a 10 foot fence. After 3 minutes the ant is 4 feet up and after 5 minutes the ant is 8 feet up. Write an equation. When will the ant be at the top of the fence? Equation:When will ant be at top of the fence? |

Chapter 2: Graph Functions and Inequalities

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| .1.  2. screenshot_02screenshot_02  |
| 3. . 4. screenshot_02screenshot_02    |
| 5. Jill is shopping for her kids birthday present at the American Girl Store and has atmost $500 to spend. Dolls are $115 each and outfits are $32 each. Write an inequality to represent this situation and graph the possible solutions. Label each axis. |

Chapter 3: Solve and Apply Systems of Equations

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| 1.   | 2.  |
| 3.  | 4. |
| 5.  | 6. |
| 7.$$\left\{\begin{array}{c}4x-y=2\\-12x+3y= -6\end{array}\right.$$ | 8. |
| 9.  |
| 10. |

Chapter 3: Solve and Apply Systems of Inequalities

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| 1.screenshot_05 | 2.screenshot_05$\left\{\begin{array}{c}y<\frac{1}{2}\left|x+2\right|-3\\2x-3y\geq 6\end{array}\right.$ |
| 3.$$\left\{\begin{array}{c}4x+6y<12\\y\geq -\left|x\right|+5\end{array}\right.$$screenshot_05 | 4.$$\left\{\begin{array}{c}y>\left|x+2\right|\\y<-2\left|x-1\right|+10\end{array}\right.$$screenshot_05 |
| 5. Marsha is buying plants and soil for her garden. The soil cost $4 per bag, and the plants cost $10 each. She wants to buy at least 5 plants and can spend no more than $100. Write a system of linear inequalities to model the situation. Then graph the possible solutions. Label each axis. |
| 6. You can work at most 20 hours next week. You need to earn at least $92 to cover you weekly expenses. Your dog- walking job pays $7.50 per hour and your job as a car wash attendant pays $6 per hour. Write a system of linear inequalities to model the situation. Label each axis. |