pName		Period	
Int 2 Acc	Homework 1-6 Creating Linear Equations (Part 1)		Unit 1
Match the following equiva	lent equations:		
1. $y = 2x - 3$ 2. $y = 3x - 2$ 3. $y = -2x + 3$ 4. $y = -3x + 2$		A. $y = 3 - 2x$ B. $y = -3 + 2x$ C. $y = -3 - 2x$ D. $y = -2 - 3x$ E. $y = 2 - 3x$	
		F. y = -2 + 3x	

- a. It costs Marcus \$2.50 for each visit to his gym, plus it costs him \$30 to join. Write an equation to calculate how much the gym will cost him this year depending on how many visits he makes. (If slope-intercept form, write in 2 ways.)
 - b. How many times would Marcus need to attend the gym for it to cost him \$92.50?
- 6. a. You are in charge of buying the hamburger and chicken for a party. You have \$60 to spend. The hamburger costs \$2 per pound and chicken is \$3 per pound. Write an equation that represents the different amounts of hamburger, *x*, and chicken, *y*, that you can buy. (If slope-intercept form, write in 2 ways.)
 - b. If you buy 15 pounds of hamburger, how many pounds of chicken can you buy?
- 7. a. Elisa buys a house that has a patio partially completed in the backyard. To finish the patio she decides she can lay 130 bricks per day. There are 22 bricks in the patio to start with. Write an equation that would calculate how many bricks will be on the patio depending on how many days Elisa has been working. (If slope-intercept form, write in 2 ways.)
 - b. The patio will be finished when it has a total of 1192 bricks. How many days will it take to finish the patio.
- **8.** a. A bank account starts with \$1550 and you withdraw (take out) \$15 a day. Write an equation to calculate how much money remains in the account depending on how many days they have been withdrawing money. (If slope-intercept form, write in 2 ways.)
 - b. How long will it take them to empty the account?

- **9.** a. You are buying \$48 worth of lawn seed that consists of two types of seed. One type is a quickgrowing rye grass that costs \$4 per pound, and the other type is a higher-quality seed that costs \$6 per pound. Write an equation that represents the different amounts of \$4 seed, *x*, and \$6 seed, *y*, that you can buy. (If slope-intercept form, write in 2 ways.)
 - b. If you buy 3 pounds of \$4 seed, how many pounds of \$6 seed can you buy?
- **10.** Your grandmother made 240 oz. of jelly. You have two types of jars. The first holds 10 oz. And the second holds 12 oz. Write an equation that represents the different number of 10-oz. jars, *x*, and 12-oz. jars, *y*, that will hold all of the jelly. (If slope-intercept form, write in 2 ways.)
- **11.** Mike makes \$5 just for showing up for work on time, and \$10 an hour while he is there.
 - a) Assuming he does go to work, and that he is always on time write two equations in slope-intercept form to represent this.
 - b) How much would he make if he worked for 8 hours?
 - c) How many hours does he need to work to make \$105?
- 12. Your school is sponsoring a pancake dinner to raise money for a field trip. You estimate that 200 adults and 250 children will attend. Let *x* represent the cost of an adult's ticket and *y* represent the cost of a child's ticket. Write an equation that can be used to find out what ticket prices to set in order to raise \$3800. (If slope-intercept form, write in 2 ways.)
- 13. You are running a concession stand at the basketball game. You sell hot dogs for \$1 and sodas for \$0.50. At the end of the night, you made \$200. Let *x* represent the number of hot dogs sold and *y* represent the number of sodas sold. Write an equation that can be used to find out how many hot dogs and how many sodas were sold. (If slope-intercept form, write in 2 ways.)
- **14.** A new recreation center charges \$5 to sign-up and then \$9 per visit. Write an equation to represent the situation. (If slope intercept form, write in 2 ways.)

- **15.** Alberto won 81 lollipops playing the bean bag toss at his school's game night. He decides to give 3 away to each friend he sees. Write an equation representing how many lollipops he has left. (If slope-intercept form, write in 2 ways.)
- **16.** To rent a bike from Matt's Bike Shops it cost \$18 and then \$2 per hour. Write an equation representing how much the total will be to rent a bike. (If slope-intercept form, write in 2 ways.)
- **17.** Samuel and Fred bought 3 boxes of cereal and 2 gallons of milk. Their total was \$12.73. Write an equation that would give you the possible combinations of prices for the items. (If slope-intercept form, write in 2 ways.)
- **18.** Jimmy was given \$10 for his birthday and he is paid \$5 per lawn that he mows. Write an equation that would calculate how much money Jimmy has based on how many lawns he has mowed. (If slope-intercept form, write in 2 ways.)
- **19.** Aliyah's Custom Kitchen Supplies sells forks and spoons. It costs the store \$2 to buy the supplies for a fork and \$1 to buy the supplies to make a spoon. They spent \$38 on supplies. Write an equation representing the different combinations for spoons and forks. (If slope-intercept form, write in 2 ways.)
- **20.** Mike has \$200 and starts spending \$5 per day. Write an equation that represents how much money he has. (If slope-intercept form, write in 2 ways.)
- **21.** A farmer has 15 cows in his field. He begins increasing his herd by 2 cows per month. Write an equation representing how many cows he has. (If slope-intercept form, write in 2 ways.)