1.3A BINGO   Name: _Key_

Directions: Pick three squares. Write a system of inequalities to represent the constraints (restrictions) of the situation.

You are grocery shopping and plan to buy some fruit. An apple costs $2 and a banana costs $1. A: # of apples B: # of bananas • You have to buy at least 3 apples. • You want at least 2 bananas. • You buy at most 8 items. $a \geq 3$ $b \geq 2$ $a + b \leq 8$	Your family is going to the movies and you are buying the tickets. An adult ticket costs $6 and a child ticket costs $4. A: # of adult tickets C: # of child tickets • You have to buy at least 2 adult tickets. • You have to buy at least 4 child tickets. • You can spend at most $60. $a \geq 2$ $c \geq 4$ $\$6a + \$4c \leq \$60$	You have a piñata with Kit Kats and Reeses at your birthday party. K: # of Kit Kats R: # of Reeses • There are at most 70 candies in the piñata. $K + R \leq 70$
Lydia has a coin jar with just dimes and quarters. D: # of dimes Q: # of quarters • There are at most 100 coins in the jar. $D + Q \leq 100$	The local gym charges a fee for playing a club sport. Basketball costs $2 per week and soccer costs $3 per week. B: # of weeks playing basketball S: # of weeks playing soccer • You can play no more than 4 weeks of basketball. • You can play at least 2 weeks of soccer. • You want to spend at most $30. $B \leq 4 \quad S \geq 2$ $\$2B + \$3S \leq \$30$	You have two jobs and want to save some money. You make $7 per hour raking leaves and $9 per hour babysitting. R: # of hours raking leaves B: # of hours babysitting _at most_ • You can <u>only work 14 hours</u> per week. • You want to save at least $40. $R + B \leq 14$ $\$7R + \$9B \geq \$40$
You are trying to raise money for a school play and want to sell cookie dough. Chocolate chip dough costs $10 per tub and snickerdoodle dough costs $12 per tub. C: # of tubs of chocolate chip dough S: # of tubs of snickerdoodle dough • You want to sell at least 4 chocolate chip tubs. • You want to sell at least 5 snickerdoodle tubs. $C \geq 4$ $S \geq 5$	A pie contains raspberries and blueberries. R: # of pounds of raspberries B: # of pounds of blueberries • There are at most 4 pounds of raspberries and blueberries in the pie. $R + B \leq 4$	Michael has an iTunes gift card and wants to buy some music and TV shows. Music costs $1 per song and TV shows cost $3 per show. S: # of songs T: # of TV shows • He wants to buy at least 3 songs. • He wants to buy at most 4 shows. • He spends no more than $20. $S \geq 3 \quad T \leq 4$ $\$1S + \$3T \leq \$20$