Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_

7.EE.4b Inequalities

\_\_\_\_\_1. Craig went bowling with $25 to spend. He rented shoes for $5.25 and paid $4.00 for each

game. What was the greatest number of games Craig could have played? (2014)

A. 4 B. 5 C. 6 D. 7

\_\_\_\_\_2. Ben earns $9 per hour and $6 for each delivery he makes. He wants to earn more than $155 in

an 8-hour workday. What is the **least** number of deliveries he must make to reach his goal? (2015)

A. 11 B. 12 C. 13 D. 14

\_\_\_\_\_3. Addison wants to ride her bicycle more than 80 miles this week. She has already ridden her

bicycle 18 miles. Which inequality could be used to determine the mean number of miles, m,

she would need to ride her bicycle each day for six more days to achieve her goal?

(no calculator) (2016)

A. 6m + 18 < 80 C. 6m + 18 > 80

B. 6m - 18 < 80 D. 6m - 18 > 80

\_\_\_\_\_4. A trailer will be used to transport several 40-kilogram crates to a store. The greatest amount of

weight that can be loaded onto the trailer is 1,050 kilograms. An 82-kilogram crate has

already been loaded onto the trailer. What is the greatest number of 40-kilogram crates that

can also be loaded onto the trailer? (no calculator) (2016)

A. 24 B. 25 C. 26 D. 27

\_\_\_\_\_5. Winston needs at least 80 signatures from students in his school before he can run for

class president. He has 23 signatures already. He and two of his friends plan to get the

remaining signatures during lunch. If each person gets the same number of signatures,

which inequality can Winston use to determine the minimum number of signatures

each person should get so he can run for class president? (2017) no calculator

A. 3*x* + 80 > 23 C. 3*x* + 23 > 80

B. 3*x* + 80 < 23 D. 3*x* + 23 < 80

\_\_\_\_\_6. Yolanda participated in a walkathon in which each kilometer walked raised $10 for charity. Her

goal was to raise more that $300 on Saturday and Sunday. She raised $50 on Saturday. Which

graph shows all the distances in kilometer, that Yolanda could have walked on Sunday to reach

her goal? (2017)



\_\_\_\_\_7. Josh has a rewards card for a movie theater. (2018)

* He receives 15 points for becoming a rewards card holder.
* He earns 3.5 points for each visit to the movie theater.
* He needs at least 55 points to earn a free movie ticket.

Which inequality can Josh use to determine *x*, the minimum number of visits he needs to earn

his first free movie ticket?

1. 55 > 3.5x + 15 B. 55 > 15x + 3.5 C. 55 < 3.5x + 15 D. 55 < 15x + 3.5

\_\_\_\_\_8. Manny goes bowling.

* He has $25.00 to spend.
* He spends $4.25 to rent shoes.
* He spends $2.50 for each game he bowls.

Which inequality can Manny use to determine, the greatest number of games he can bowl? (2019)

1. 2.5 + 4.25x > 25 B. 4.25 + 2.5x > 25 C. 2.5 + 4.25x < 25 D. 4.25 + 2.5x < 25

\_\_\_\_\_9. A coach of a baseball team orders hats for the players on his team. Each hat costs $9.95. The

shipping charge for the entire order is $5.00. There is no tax on the order. The total cost of the

coach’s order is less than $125. Which inequality can be used to determine the greatest

number of hats, *h*, the coach orders? (2019)

1. 5h + 9.95 > 125 B. 5h + 9.95 < 125 C. 9.95h + 5 > 125 D. 9.95h + 5 < 125

10. Harper has $15.00 to spend at the grocery store. She is going to buy bags of fruit that cost $4.75

each and one box of crackers that costs $3.50. Write and solve an inequality that models this

situation and could be used to determine the **maximum** number of bags of fruit, *b*, Harper can buy.

***Show your work.*** (2015)

***Answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** bags of fruit

11. Jim needs to rent a car. A rental company charges $21.00 per day to rent a car and $0.10 for every

mile driven. (2018)

* He will travel 250 miles
* He has $115.00 to spend

Write an inequality that can be used to determine *d*, the maximum number of days that Jim can rent a car.

***Inequality*** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Jim believes the maximum whole number of days he can rent the car is 5. Is he correct? Why or why not?

***Explain your answer.***

**7.EE.7b**

\_\_\_\_\_1. For her cell phone plan, Heather pays $30 per month plus $0.05 per text. She wants to keep

her bill under $60 per month. Which inequality represents the number of texts, *t*, Heather can

send each month while staying within her budget? (2015)

*A. t* < 600 *B. t* > 600 *C. t* < 1,800 *D. t* > 1,800