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

7.EE.4a

\_\_\_\_\_1. Which steps can be used to solve for the value of *y* ? (2013)

(*y* + 57) = 178

A. divide both sides by then subtract 57 from both sides

B. subtract 57 from both sides, then divide both sides by

C. multiply both sides by, then subtract 57 from both sides

D. subtract from both sides, then subtract 57 from both sides

\_\_\_\_\_\_2. Carmine paid an electrician *x* dollars per hour for a 5-hour job plus $70 for parts. The

total charge was $320. Which equation can be used to determine how much the electrician

charged per hour? (2013)

A. 5*x* = 320 + 70 B. 5*x* = 320 – 70 C. (70 + 5)*x* = 320 D. (70 − 5)*x* = 320

\_\_\_\_\_3.Solve for *x* . (2014)

0.5*x* + 78.2 = 287

A. x = 104.4 B. x = 417.6 C. x = 495.8 D. x = 730.4

\_\_\_\_\_\_4. Katie bought 4 sweaters that each cost the same amount and 1 skirt that cost $20.

The items she bought cost a total of $160 before tax was added. What was the cost

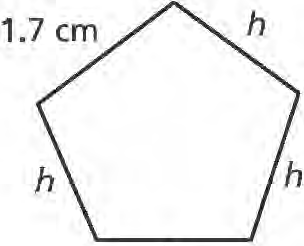
of each sweater? (2014)

A.$20 B. $35 C. $40 D. $45

\_\_\_\_\_5. The perimeter of a certain pentagon is 10.5 centimeters . Four sides of this pentagon have

the same length, in centimeters, h, and the other side has a length of 1.7 centimeters, as

shown below. (no calculator) (2016)



What is the value of h ?

A.2.2 B. 3.7 C. 4.8 D. 8.8

\_\_\_\_\_6. Mike took a taxi from his home to the airport. The taxi driver charged an initial fee of $6 plus

$3 per mile. The total fare was $24, not including the tip. How many miles did Mike travel by

taxi on this ride? (2016)

A.2 B. 6 C. 8 D. 10

\_\_\_\_\_7. When Keisha installed a fence along the 200-foot perimeter of her rectangular back yard, she

left an opening for a gate. In the diagram below, she used x to represent the length, in feet,

of the gate. (2016 7.EE.4a)



What is the value of x ?

A.10 B. 20 C. 25 D. 30

\_\_\_\_\_8. Ms. Gartland bought ***x*** number of shirts for the new members of her chorus. The cost for the ***x***

number of shirts, including $3.99 shipping, was $77.49. Each shirt cost $12.25. There was no

sales tax on this purchase. Which equation could be used to find ***x***? (2017 7.EE.4a)

1. 3.99(x + 12.25) = 77.49 C. 12.25(x + 3.99) = 77.49
2. 3.99x + 12.25 = 77.49 D. 12.25x + 3.99 = 77.49

\_\_\_\_\_9. Mr. Santino needs a total of 406 forks for his restaurant. He currently has 278 forks.

If each set has 12 forks, what is the minimum number of sets of forks he should buy?

(2017) no calculator

A. 11 B. 12 C. 128 D. 140

\_\_\_\_\_10. Bob buys eggs and potatoes at a store.

* He pays a total of $25.92.
* He pays $2.57 for the eggs.
* He buys 5 bags of potatoes that each cost the same amount

Which equation can be used to determine the cost, *x,* of each bag of potatoes?

1. x = (25.92 – 2.57) ÷ 5 C. x = (25.92 + 2.57) ÷ 5
2. x = 25.92 ÷ 5 + 2.57 D. x = 25.92 ÷ 5 – 2.57

\_\_\_\_\_11. Clara goes miniature golfing. She pays $7.50 for an admission ticket and $6.25 for each round

she golfs. The total amount Clara pays for admission and the number of rounds she golfs is

$26.25. which equation can be used to determine the number of rounds, x, that Clara golfs?

(2019)

1. 6.25x + 7.50 = 26.25 C. 7.50x + 6.25 = 26.25
2. 6.25x – 7.50 = 26.25 D. 7.50x – 6.25 = 26.25

\_\_\_\_\_12. A worker at a snack stand opened a new box of cups. The first day, the worker used 30 cups

from the box. The second day, the worker used 15% of the remaining cups in the box. A total

of 90 cups were used on the second day. What was the original number of cups in the box

before any cups were used? (2019)

A. 400 B. 570 C. 630 D. 800

13. Mr. Gonzales has only $42.50 to spend at a clothing store. He wants to buy a shirt that costs $29,

including tax, and some bracelets that cost $4.50 each, including tax. Write an equation to

determine *x*, the maximum number of bracelets Mr. Gonzales could buy. (2014)

***Equation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

Solve the equation to determine the number of bracelets Mr. Gonzales could buy.

***Show your work.***

***Answer \_\_\_\_\_\_\_\_\_\_\_*** bracelets

14. Members of a baseball team raised $967.50 to go to a tournament. They rented a bus for $450.00

and budgeted $28.75 per player for meals. They will spend all the money they raised. Write and

solve an equation that models this situation and could be used to determine the number of players,

*p,* the team could bring to the tournament. (2015)

***Show your work.***

***Answer*** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ players

15. Ms. Hernandez has $100 to spend on parking and admission to the zoo. The parking

will cost $7, and admission tickets will cost $15.50 per person, including tax. Write

and solve an equation that can be used to determine the number of people that she

can bring to the zoo, including herself. (2016)

***Show your work.***

***Answer*** \_\_\_\_\_\_\_\_\_\_\_\_\_\_people

16. Mario is setting up a new tent during a camping trip. The tent came with 7 feet of rope. The

instructions are to use 34.5 inches of the rope to tie a tarp on top of the tent. Then, the remaining

rope should be cut into inch sections to tie the tent to stakes in the ground. Mario will use all

of the rope as instructed. Write and solve an equation to determine the number of inch

sections of rope Mario can cut from the rope. (2018)

***Show your work***

***Answer*** \_\_\_\_\_\_\_\_\_\_\_\_\_\_sections

17. Todd orders pictures from a photographer. Each picture costs $7.50. A one time shipping fee of

$3.25 is added to the cost of the order. The total cost of Todd’s order before tax is $85.75. How many

pictures did Todd order? (2019)

***Show your work***

***Answer*** \_\_\_\_\_\_\_\_\_\_\_\_\_\_pictures