Scenario A: Ms. Smith is putting new ceramic tile in her home office. The dimensions of her office are 10 ft. by 8 ft. Ms. Smith is going to use tiles that are 12 in. by 12 in. The tiles come in boxes of 15 tiles.

1. What is the area of Ms. Smith’s home office (in square feet)? \_\_\_\_\_\_\_\_

2. What are the dimensions of one tile in feet? \_\_\_\_\_\_\_\_ ft by \_\_\_\_\_\_\_\_ ft

3. What is the area of one tile (in square feet)? \_\_\_\_\_\_\_\_

4. How many tiles does Ms. Smith need for her home office? \_\_\_\_\_\_\_\_

5. How many boxes of tiles does Ms. Smith need to buy? \_\_\_\_\_\_\_\_\_

6. Ms. Smith must pay $21.45 for a box of 15 tiles. She must also pay an 8% sales tax.

* What is her total cost for the tiles?

\_\_\_\_\_\_\_\_

* What is her change if she pays with two $100 bills? \_\_\_\_\_\_\_\_

Scenario B: Mrs. Lamb bought a Disney Princess Playhouse for her youngest daughter. Its regular price was $82, but it was on sale for 20% off. Mrs. Lamb also had to pay an 8% sales tax.

7. What is SALE price of the playhouse (before tax)? \_\_\_\_\_\_\_\_

8. What was the final amount that Mrs. Lamb paid for the playhouse? \_\_\_\_\_\_\_\_

Scenario C: Caroline worked this summer, so she opened up a student checking account.

9. Caroline started the month with $247 in her account. She deposited $89 cash and checks for $25 and $73. She used her debit card for four purchases: $6, $31, $12, and $7. Which expression can NOT be used to represent the amount of money that Caroline now has in her account?

A 247 + 89 + 25 + 73 – 6 – 31 – 12 – 7

B 247 + 89+25+73 + (–6) + (–31) + (–12) + (–7)

C 247 + (89 + 25 + 73) – (6 + 31 + 12 + 7)

D 247 + 89 + 25 + 73 – 6 + 31 + 12 + 7

10. How much money does Caroline now have in her account? \_\_\_\_\_\_\_\_

11. Caroline noticed that she had three bank fees that were two dollars each.

Write an expression to represent this situation. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. Caroline also noticed that the bank took off two bank fees of five dollars each; apparently the bank had wrongly charged her. Write an expression to represent this situation. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. How much money does Caroline now have in her account? \_\_\_\_\_\_\_\_

Skills Practice: Simplify each expression.

14. (-2)(-3)(5)=\_\_\_\_\_ 15. 120(-4)(3)=\_\_\_\_\_

16. -3 + 7 = \_\_\_\_\_ 17. -5 + (-2) = \_\_\_\_\_

18. -4 – 3 = \_\_\_\_\_ 19. -5 – (-2) = \_\_\_\_\_

20. -2 – 2 = \_\_\_\_\_ 21. -3 – (-7) = \_\_\_\_\_