***MTH1W – Building Expressions***

1. Write a mathematical expression that matches the description. Then determine a simplified value for your expression.

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|  | **DESCRIPTION** | **WRITE AN EXPRESSION FOR…** |
| a) | You start with $50 in your bank account. On three different days you deposit $20 into your account. | Money in bank account |
| b)  | You have $20. You give $2 to your sister, then split what’s left over with your two friends. | How much money you get |
| c) | A hotel has 20 rooms total. It makes $50 for every occupied room, and loses $20 for every empty room. On a particular night, 14 of the rooms are occupied. | Total profit |
| d) | You have $35 and withdraw $200 from your bank account. Then you buy a pair of pants for $34.00, 2 shirts for $16.00 each, and 2 pairs of shoes for $24.00 each.  | How much money you have left over |
| e) | You have $200 to spend on supplies for an event. After taking a taxi for $10, you spend half of what’s left on food. You then take another taxi for $10. | How much money you have left over |
| f) | You bought 10 t-shirts for $20 each, then sold half of them for $25 each and the other half for $30 each. | The amount of money you make |
| g) | An event charges $5 per child and $8 per adult, and spends $2 per child and $4 per adult on supplies. 25 children and 15 adults attend the event. | Profit of event |
| h) | A club has 6 people in it, and they are fundraising. Four of the people raise $30, and the rest raise $20. Then the generous principal offers to double the amount the club raised. | Total amount raised |
| i) | You start with $250. You buy 2 pairs of pants at $25 each and 3 caps at $30. You invest the rest of your money and its value triples after a year.  | How much money you end up with |
| j) | You are preparing some packages of school supplies. Each package contains 5 pencils that cost $0.50 each, 2 erasers that cost $1 each, and one pair of scissors that cost $2. You prepare 12 of these packages to give away.  | Total cost |
| k) | You have $450. You spend $210 on food. Later you divide all the money into four parts out of which three parts were distributed and one part you keep for yourself. Then you find $50 on the road. | How much money you have in the end |
| l) | You earn $12/hour at your job. You work a four hour shift and a six hour shift, then take your friend out to a lunch buffet that costs $15 per person. You keep a quarter of what’s left over as spending money, and deposit the rest in the bank. | What you keep for yourself |
| m) | What you deposit in the bank |
| n) | You work 5 shifts at your job, with each shift paying you $15. You save half your money, then donate what’s left to three different charities.  | How much money you get |
| o) | How much money each charity gets |

1. Invent a situation that matches each mathematical expression.

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| a) |  |  |
| b) |  |  |
| c) |  |  |
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