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

UNIT 1 LESSON 10

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| AIM: | SWBAT solve multi-step problems |

**Interaction with New Material**

SALE!!!!!!

* T-shirts: $9.99
* Jeans: $39.99

**Ex. 1)** When Mrs. Pierre saw the sale in the window sign to the right, she decided to buy clothes for each child in her family. She bought each of her 6 children a pair of jeans and a t-shirt. Sales tax was $14.35. Mrs. Pierre decided to pay the bill in five equal installments over the next five months. How much were her monthly payments? Round your answer to the nearest penny.

**PARTNER PRACTICE**

CFS:

* + Problem is annotated with margin notes to provide additional meaning
  + Model is drawn to represent known and unknown information
  + Estimate is completed
  + All calculations are shown
  + Check is performed

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| *Bachelor Level* |

1. Ms. Havens is retiling her square bathroom. One of the bathroom’s walls is 3.2 feet wide. Tiles costs $10.50 per square foot. How much will it cost Ms. Havens to retile her entire bathroom floor?

***Show your work.***

1. The table below lists the prices of items that can be ordered at a local pizzeria. Marshaun and Laura bought a large pepperoni pie and a small Cesar salad, both to share. They left a $5 tip. If the two of them split the meal evenly, how much did they each pay?

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| --- | --- | --- |
| **Item** | **Small** | **Large** |
| **Cheese Pizza** | **$9.99** | **$17.95** |
| **Mushroom Pizza** | **$10.50** | **$18.45** |
| **Pepperoni Pizza** | **$10.50** | **$18.45** |
| **Mixed Salad** | **$5.50** | **$9.50** |
| **Cesar Salad** | **$6.95** | **$11.95** |

***Show your work.***

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| *Master Level* |

1. The sand pit for the long jump has a width of 2.75 meters and a length of 9.54 meters. Just in case it rains, the principal wants to cover the sand pit with a piece of plastic the night before the event. At the local hardware store, plastic is sold by the square meter and costs $0.95 per square meter. How much will it cost to buy a piece of plastic that will completely cover the sand pit?

***Show your work.***

**INDEPENDENT PRACTICE**

CFS:

* + Problem is annotated with margin notes to provide additional meaning
  + Model is drawn to represent known and unknown information
  + Estimate is completed
  + All calculations are shown
  + Check is performed

|  |
| --- |
| *Bachelor Level* |

1. L.B. Johnson Middle School held a track and field event during the school year. Miguel took part in a four-person shot put team. Shot put is a track and field event where athletes throw (or “put”) a heavy sphere, called a “shot,” as far as possible. To determine a team score, the distances of all team members are added. The team with the greatest score wins first place. The current winning team’s final score at the shot put is 52.08 ft. Miguel’s teammates threw the shot put the following distances: 12.26 ft., 13 ft., and 13.75 ft. Exactly how many feet will Miguel need to throw the shot put in order to tie the current first place score?

***Show your work.***

1. Al-Shacore went on a number of hikes this summer. The distance of each hike is recorded in the table below. He hiked Devil’s Pass 5 times, Breakneck Ridge 8 times, and Mt. Washington 3 times. How many total miles did Al-Shacore hike this summer?

|  |  |
| --- | --- |
| **Hike** | **Distance (in miles)** |
| Mt. Washington | 19.7 |
| Devil’s Pass | 36.2 |
| Breakneck Ridge | 9.25 |

***Show your work.***

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| --- |
| *Master Level* |

1. On Sunday, Andrew bought a bottle of water for $1.75, five books for $10.50 each, and three slices of pizza for $3.75 each. At the end of the day, he had $51.50 left. How much did Andrew start the day with?

***Show your work.***

1. James is saving up to buy himself a new drum set that costs $1299.98, plus $149 in tax. He has already saved $500 and his parents have agreed to pay for half of the total cost. He wants to save the rest of the money he needs over six months. If he saves the same amount each month, how much does he have to save each month? Round your answer to the nearest penny.

***Show your work.***

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| *PhD Level* |

1. Albert is creating a rectangular garden in his back yard. He set up a fence that surrounded the garden that is 42.4 feet long. The width of the garden is 10.1 feet long. He is planning on plotting four different crops – lettuce, peppers, tomatoes, and carrots – on equal sized plots.

**Part A:** Write a numerical expression to represent how much space, in square feet, Albert will use in his garden for each crop.

**Part B:** How much space, in square feet, will Albert use of his garden for each crop?

***Show your work.***

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

**EXIT TICKET**

|  |  |  |  |
| --- | --- | --- | --- |
| Self-assessment | I mastered the learning objective today. | I am almost there. | Need more practice and feedback. |
| Teacher feedback | You mastered the learning objective today. | You are almost there. | You need more practice and feedback. |

1. Mr. Friedline is an incredible gardener. He has a rectangular plot of land that he uses for his garden in his back yard that measures 74.52 square feet. Recently, animals have been getting into his garden, so he wants to put up a fence around the garden. If the length of the garden is 8.1 feet, how many feet of fence does he need to surround the entire garden?

***Show your work.***