A DOLLARS AND CENTS

A.1 CALCULATING THE TOTAL IN DECIMAL FORM

Ex 1: Calculate the total in decimal form:





$$= 1 \$ + 10 c$$

= $\boxed{1.10} \$$

Answer:

$$1\$ + 10 c = 1\$ + 0.10\$$$

= 1.10\$

Ex 2: Calculate the total in decimal form:





$$= 2 \$ + 50 c$$

= $2.50 \$$

Answer:

$$2 + 50 c = 2 + 0.50$$

= 2.50 \$

Ex 3: Calculate the total in decimal form:







$$= 5 \$ + 10 c + 10 c$$

= $5.20 \$$

Answer:

$$5 \$ + 10 c + 10 c = 5 \$ + 0.10 \$ + 0.10 \$$$

= 5.20 \$

Ex 4: Calculate the total in decimal form:







$$= 50 c + 50 c + 50 c$$

= $\boxed{1.50}$ \$

Answer:

$$50 c + 50 c + 50 c = 0.50 \$ + 0.50 \$ + 0.50 \$$$

= 1.50 \$

Ex 5: Calculate the total in decimal form:







$$= 10 \$ + 5 \$ + 50 c$$

= $15.50 \$$

Answer:

$$10 \$ + 5 \$ + 50 c = 10 \$ + 5 \$ + 0.50 \$$$

= 15.50 \$

A.2 CHECKING IF YOU HAVE ENOUGH MONEY TO BUY ITEMS

MCQ 6: In this wallet, Su has 50 cents and 25 cents:





Does she have enough money to buy an ice cream for 1 dollar



☐ Yes

⊠ No

Answer:

$$50 c + 25 c = 0.50 \$ + 0.25 \$$$

= 0.75 \$

Su has 0.75 dollars, but the ice cream costs 1 dollars. So, she does **not** have enough money.

MCQ 7: In this wallet, Su has 50 cents, 50 cents, and 10 cents:







Does she have enough money to buy an ice cream for 1 dollar



⊠ Yes

 \square No

Answer:

50 c + 50 c + 10 c = 0.50
$$+ 0.50 + 0.10$$

= 1.10 $+ 0.50 + 0.10$

Su has 1.10 dollars, and the ice cream costs 1.00 dollar. So, she **does** have enough money.

MCQ 8: In this wallet, Hugo has three coins of 50 cents:







Does he have enough money to buy a chocolate for 1.30 dollars= ?

⊠ Yes

 \square No

Answer:

$$50 c + 50 c + 50 c = 0.50 \$ + 0.50 \$ + 0.50 \$$$

= 1.50 \$

Hugo has 1.50 dollars, and the chocolate costs 1.30 dollars. So, he **does** have enough money.

MCQ 9: In this wallet, Louis has 2 dollars and 2 dollars:





Does he have enough money to buy a toy car for 3.90 dollars



⊠ Yes

□ No

Answer:

$$2 \$ + 2 \$ = 4 \$$$

Louis has 4 dollars, and the toy car costs 3.90 dollars. So, he does have enough money.

A.3 CALCULATING CHANGE WHEN BUYING ITEMS

Ex 10: Louis wants to buy bananas for 2.50 dollars = . He gives 4 dollars to the seller. How much does the seller give back?

Answer:

$$4\$ - 2.50\$ = 1.50\$$$

The seller gives back 1.50 dollars to Louis.

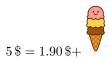
$$4\$ = 1.50\$ +$$

Ex 11: Su wants to buy an ice cream for $3.10 \text{ dollars} = \checkmark$. She gives 5 dollars to the seller. How much does the seller give back?

Answer:

$$5\$ - 3.10\$ = 1.90\$$$

The seller gives back 1.90 dollars to Su.



7.50 \$

Answer:

$$20\$ - 12.50\$ = 7.50\$$$

The seller gives back 7.50 dollars to you.

$$20\$ = 7.50\$ +$$

Ex 13: You want to buy a fruit basket for 13.20 dollars

= . You give 15 dollars to the seller. How much does the seller give back?

Answer:

$$15\$ - 13.20\$ = 1.80\$$$

The seller gives back 1.80 dollars to you.



B PROFIT AND LOSS

B.1 IDENTIFYING PROFIT AND LOSS

MCQ 14: Leo buys art supplies for 65 \\$. He sells his finished painting for 50 \\$. Did Leo make a profit or a loss?

□ Profit

□ Loss

Answer: First, we identify the income and expenses.

• Income: 50 \$ (money received)

• Expenses: 65 \$ (money spent)

Next, we compare them. Since the expenses (65 \$) are greater than the income (50 \$), Leo made a loss.

To calculate the amount of the loss:

$$\label{eq:Loss_expenses} \begin{split} \text{Loss} &= \text{Expenses} - \text{Income} \\ &= 65 \ \$ - 50 \ \$ \\ &= 15 \ \$ \end{split}$$

Leo had a loss of 15 \$.

MCQ 15: Chloe bakes cupcakes. She spends 22 \$ on ingredients and decorations. She sells all the cupcakes for a total of 40 \$. Did Chloe make a profit or a loss?

□ Profit

□ Loss

Answer: First, we identify the income and expenses.

• Income: 40 \$ (money received)

• Expenses: 22 \$ (money spent)

Next, we compare them. Since the income (40 \$) is greater than the expenses (22 \$), Chloe made a **profit**.

To calculate the amount of the profit:

$$Profit = Income - Expenses$$
$$= 40 \$ - 22 \$$$
$$= 18 \$$$

Chloe made a profit of 18 \$.

MCQ 16: A bookstore buys a shipment of books for 250 \$. Due to low sales, they only sell 180 \$ worth of the books. Did the bookstore make a profit or a loss on this shipment?

□ Profit

□ Loss

Answer:

Profit = 12 \$ - 8.50 \$= 3.50 \$

3.50 \$

Answer: First, we identify the income and expenses.

• Income: 180 \$ (money received)

• Expenses: 250 \$ (money spent)

Next, we compare them. Since the expenses (250 \$) are greater than the income (180 \$), the bookstore made a **loss**.

To calculate the amount of the loss:

$$Loss = Expenses - Income$$
$$= 250 \$ - 180 \$$$
$$= 70 \$$$

The bookstore had a loss of 70 \$.

MCQ 17: Maria buys a used bicycle for 35 \$. She cleans it, repaints it, and sells it at a market for 80 \$. Did Maria make a profit or a loss?

□ Profit

□ Loss

Answer: First, we identify the income and expenses.

• Income: 80 \$ (money received)

• Expenses: 35 \$ (money spent)

Next, we compare them. Since the income (80 \$) is greater than the expenses (35 \$), Maria made a **profit**.

To calculate the amount of the profit:

Profit = Income - Expenses
=
$$80 \$ - 35 \$$$

= $45 \$$

Maria made a profit of 45 \$.

B.2 CALCULATING PROFITS

Ex 18: Sarah earns 10 \$ from selling lemonade. She spends 4 \$ on lemons and sugar. What is her profit?

6 \$

Answer:

Profit =
$$10 \$ - 4 \$$$

= $6 \$$

Sarah made a profit of 6 \\$. That means she makes money.

Ex 19: Noah sells cookies for 16 \$. He spends 9 \$ on ingredients. What is his profit?

7 \$

Answer:

Profit =
$$16 \$ - 9 \$$$

= $7 \$$

Noah made a profit of 7 \\$. That means he makes money.

Ex 20: Ava buys a scarf for 8.50 \$ and sells it for 12 \$. What is her profit?

= 3.50 \$

Ava made a profit of 3.50 \$. That means she makes money.

Ex 21: Mia sells handmade cards for 10 \$. She spends 3.50 \$ on paper and markers. What is her profit?

6.50 \$

Answer:

Profit =
$$10 \$ - 3.50 \$$$

= $6.50 \$$

Mia made a profit of 6.50 \$. That means she makes money.