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

**CFS for top quality work**

* + Number line is labeled with **zero, p-value, q-value, and arrows**
  + Arrow indicate magnitude and direction for p-value and q-value
  + Answer is given in the context of the problem (if applicable)

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

UNIT 1 LESSON 2

**AIM**: SWBAT represent and add integers from -100 to 100

**THINK ABOUT IT!**

Given the two number lines below, write an addition expression for each and determine the sum

20

0 25 ?

-10

0 ? 30

Key point

|  |
| --- |
| Mathematicians use blank \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ to model large quantities to determine sums |

**Interaction with New Material**

Ex. 1) Evaluate the expression -25 + (-40)

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Ex. 2) What is the sum of the following expression? -22 + 34

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**PARTNER PRACTICE**

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

1. Model the following expression by drawing a number line.

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-56 + (-12)

1. Model the following expression and determine the sum.

44 + (-62)

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|  |
| --- |
| *Master Level* |

1. Tim’s current bank account is $75. He adds a charge of -$31 when he buys lunch for him and a friend.

*Part A:* Write an expression that represents this situation

*Part B:* Use a number line to determine the new balance of Tim’s account. What number could be added to the expression 43 + (-52) to result in a sum of zero? Model your answer using a number line.

1. A number added to -25 results in an even less value. Which of the following could be that number? Select all that apply and model the situation to prove your choice(s).
2. 3
3. 2
4. 1
5. 0
6. -1
7. -2
8. -3

**INDEPENDENT PRACTICE**

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| *Bachelor Level* |

**Directions:** Determine the sum by drawing a number line an modeling

1.) 42 + (-83)

**CFS for top quality work**

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2.) 12 + (-18) + (-20)

**CFS for top quality work**

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|  |
| --- |
| *Master Level* |

1. Mark’s bank account is currently overdrawn and is -$55. He deposits $80 and then buys a $20 hat. He also wants to buy a new notebook that cost $8. Use a number line to model the situation and determine if Mark has enough money. If he does, how much is left over. If he doesn’t, how much does he need?
2. Model all four expressions below using a number line

|  |  |
| --- | --- |
| 28 + 45 | -28 + 45 |
| 28 + (-45) | -28 + (-45) |

1. Use the number lines in the previous problem to answer the following question: Explain which answers were similar? How were they similar? Which answers were different? Why were they different?

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| *PhD Level* |

1. Taylor checked her bank statement and saw the following transactions that took place in a single day:

|  |  |
| --- | --- |
| *Amount* | *Description* |
| -$24 | Movie tickets |
| $90 | Deposit at bank |
| -$50 | Donation to charity |
| -$15 | 24 pack of soda |

*Step A:* Write an expression that represents the sum of all the bank activity that day

*Step B:* If Taylor started the day with $8, use a number line to determine how much is in her account after all her bank activity.

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

**CFS for top quality work**

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**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. Use a number line to model and evaluate the expression -47 + -56. Explain how you used the number line to evaluate the expression.

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1. Alonso overdrew his bank account and his account balance showed -$50. He spent an additional $37 going out to the movies with friends. Write an expression and draw a line number to determine Alfonso’s current bank account balance.