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

Unit 1 : Operations with Rational Numbers
Test Remediation

WORD PROBLEMS ~

Directions: Write a number sentence for each word problem. Solve the number sentence and write a sentence to represent the solution.

|  |  |
| --- | --- |
| Negative | Positive |
| WithdrawalLossDescendBelowDove | DepositGainAscendAboveClimbed |

1. A football team gains 12 yards on one play, loses 7 yards on the next and then gets a penalty for another 10 yards. What is the total yards lost or gained?

 12 + (-7) + (-10) =

 12 + (-17) =

 -5

Sentence: The total yards lost by the football team was 5.

1. Roger has $130 in his bank account. He withdrew money to repay his mother $42 and his best friend $13 that he had borrowed. He mowed his neighbor’s yard and deposited the $30 he earned into his bank account. What is the new balance of his account?

Sentence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. A hot air balloon rises 340 feet into the air and then descends 130 feet. What is the balloon’s new position?

Sentence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Travis gained 9 pounds during the holidays. He dieted and lost 14 pounds but gained 3 more when he went on vacation. By the end of the year, he lost another 7 pounds. If he weighed 150 pounds before the holidays, how much does he weigh now?

Sentence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. A submarine dove to a level of 450 meters below the surface of the ocean. Later it climbed 270 meters and finally dove 80 meters more. At what depth did it stop?

Sentence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. An elevator started on the 4th floor. It went up 3 floors, down 2, up 1, down 5, up 7, and down 4 floors. On what floor did the elevator stop?

Sentence:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The temperature fell 13º C on each of the first 2 days of the week. It rose 7º C on each of the next three days and fell 9º C on each of the last two days. If the temperature was originally 34º C, what was the final temperature?

Sentence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Rita had $357 in her checking account. She deposited a $175 paycheck, wrote a $320 check for vacation and a $14 check for dinner. How much was left in her account?

Sentence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Operations with Integers ~

To calculate the solution when adding or subtracting, go back to the song.

Same signs add and keep. So… If the signs are the same, the numbers keep their sign.

Different signs subtract,

higher number takes the sign. And… If the signs on the numbers are different, the number

Then you’ll be exact. with larger absolute value will take the sign into the answer.

\*\*You MUST take care of double negatives before you determine if you are calculating with SAME signs or DIFFERENT signs. \*\*

Examples

 Same Signs Different Signs Double Negatives

 4 + 6 = 4 – 10 = -5 –(-14) =

Both positive 4 is positive 10 in negative -(-14) becomes +14

 SAME SIGNS DIFFERENT SIGNS -5 + 14 =

Add and keep. subtract, higher number (-10) DIFFERENT SIGNS
 takes the negative sign.
 subtract, higher number (14)
 10 – 4 = 6 takes the sign.
 larger number goes first 14 – 5 = 9
 larger number goes first

 10 -6 9

YOUR TURN:

Directions: Solve each numeric expression using the Integer Rules. Place your solution in the line.

1. – 6 + 20 = \_\_\_\_\_\_\_\_ 10. – 3 – (-9) = \_\_\_\_\_\_\_\_ 11. 23 – 41 = \_\_\_\_\_\_\_\_
2. –4 + (-22) = \_\_\_\_\_\_\_\_ 13. 6 – (-17) = \_\_\_\_\_\_\_\_ 14. -5 – 27 = \_\_\_\_\_\_\_\_

15. – 19 + 5 = \_\_\_\_\_\_\_\_ 16. – 27 – 19 = \_\_\_\_\_\_\_\_ 17. -7 – 27 = \_\_\_\_\_\_\_\_

18. – 16 – (-3) = \_\_\_\_\_\_\_\_ 19. – 15 + (-19) = \_\_\_\_\_\_\_\_ 20. -13 – 29 = \_\_\_\_\_\_\_\_

21. – 46 + 23 – (-18) + 12 - 23 = \_\_\_\_\_\_\_\_ 22. – 13 – (-29) + (-34) – 24 – (-36)= \_\_\_\_\_\_\_\_

To calculate the solution when multiplying or dividing, go back to the song.

Multiply or divide

Two negatives Cancel out. If both numbers are negatives, the solution is positive.

IF there is only one,

You get a Negative Amount. If only one number is negative, the solutions is negative.

|  |  |  |  |
| --- | --- | --- | --- |
| 8 × 2 | 8 • 2 | 8 (2) | (8)(2) |
| The multiplication sign | The multiplication dot | A number next to parenthesis | A parenthesis next to another parenthesis |

Ways to show multiplication:

Examples

 Two Negative Signs One Negative Sign Multiple Numbers

-2 (-6) = 4 • – 10 = -5 (-9) (-3) =

 Two negatives
Two negatives cancel out Only one negative, so you cancel out.
and the solution is positive. get a negative solution. 45 (-3) =

 12 -40 Now there is only one negative so you get a negative solution.

YOUR TURN: -135

Directions: Solve each numeric expression using the Integer Rules. Place your solution in the line.

23. – 6 (-2) = \_\_\_\_\_\_\_\_ 24. ( 3) (-9) = \_\_\_\_\_\_\_\_ 25. 3 × (-27) = \_\_\_\_\_\_\_\_

26. –4 (-17) = \_\_\_\_\_\_\_\_ 27. 6 • (-11) = \_\_\_\_\_\_\_\_ 28. (-5) (-13) = \_\_\_\_\_\_\_\_

29. – 16 • (3) = \_\_\_\_\_\_\_\_ 30. -15 ( -9) = \_\_\_\_\_\_\_\_ 31. -13 × 2 = \_\_\_\_\_\_\_\_

32. – 4 • 6 × 3 (-8) = \_\_\_\_\_\_\_\_ 33. – 6 (-2) (4) (-3)= \_\_\_\_\_\_\_\_

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

Period: \_\_\_\_\_ Previous Test Score: \_\_\_\_\_

Remediation Packet/ Recovery for the Unit 1 Test

TIME LINE

Distribute Remediation Packets: Friday 9/15

Help Session (optional): Monday at 8:15 9/18
 Go to theater until Ms. Garrett signs-in

**Remediation Packets Due: Wednesday 9/21** Turn into the Make-up File during Homeroom

Answer Keys: Thursday 9/21
given to those who turn in packet

**Recovery:** **Friday 9/22**
Morning 8:15 go to Ms. Garrett’s Rm 7B2