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| Chapter 6 | Integers and the Coordinate Plane | |
| Date: | Lesson 6.1 Integers | |
| Essential Question | How can you represent a relationship between two quantities? | |
| Vocab | |  |  |  | | --- | --- | --- | | Word | Definition | Examples | |  | numbers that are greater than 0; can be written with or without a positive sign (+) |  | |  | numbers that are less than 0; are written with a negative sign (-) |  | |  | two numbers that are the same distance from 0 but are on opposite sides of 0 |  | | |
| Key Idea | ../../../../var/folders/xh/sy6yflwj5dd3kcvz3n6b5zfr0000gn/T/com.apple.Preview/com.apple.Preview.PasteboardIt | |
| Practice  Write a positive or negative integer that represents each situation. | 1) A hiker climbs 900 feet up a mountain. | 2) You have a debt of $24. |
| 3) A student loses 5 points for being late to class. | 4) A savings account earns $10. |
| Practice  Graph the integer and its opposite. | 5) - 4 | |
| 6) 75 | |
| 7) - 340 | |
| Practice | 8) Use the information below.   * Low tide is 1 foot below the average water level. * High tide if 5 feet higher than low tide.   Write an integer that represents the average water level relative to high tide. | |
|  | 9) | |

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| Chapter 6 | Integers and the Coordinate Plane |
| Date: | Lesson 6.2 Comparing and Ordering Integers |
| Essential Question | How can you use a number line to order real-life events? |
| Practice | 1) Compare – 10 and – 6 on a horizontal number line. |
| Practice  Order the integers from least to greatest. | 2) 3, -9, 6, -2, -7 |
| 3) 0, 5, -7, -1, 2 |
| Practice | 4) What is the greatest integer that is greater than -24 and less  than -10?  9 -9 -11 -23 |
| Practice  Elevation: The table shows the highest and lowest elevations for five states. |  |
| 5) Order the states by their highest elevations, from least to greatest. |
| 6) Order the states by their lowest elevations, from least to greatest. |
| 7) What does the lowest elevation for Florida represent? |

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| Chapter 6 | Integers and the Coordinate Plane | | | |
| Date: | Lesson 6.3 Fractions and Decimals on the Number Line | | | |
| Essential Question | How can you use a number line to compare positive and negative fractions and decimals? | | | |
| Practice | 1) | | | |
| 2) | | | |
| 3) -3.5 | | | |
| 4) 5.25 | | | |
| Cross Multiply to Compare Fractions | Multiply the denominator of one fraction by the numeratore of the opposite fraction. Write the product by the numerator. Repeat with the other denominator and numerator. Then, compare the products.  Example: | | | |
| Practice  Compare fractions. Write <, >, or = between each pair of fractions. | 5) | 6) | 7) | 8) |
| Comparing Mixed Numbers | 1) Check to see if both mixed numbers are positive or negative. If one is positive and one is negative, the positive mixed number is larger.  2) If the whole numbers are not the same, just compare the whole numbers and don’t worry about the fraction part.  3) If the whole numbers are the same, compare the fraction part by cross multiplying. | | | |
| Practice  Compare mixed numbers. Write <, >, or = between each pair of mixed numbers. | 9) | 10) | 11) | 12) |

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| Practice  Compare decimals. Write <, >, or = between each pair of decimals. | 13) - 7.3 6.7 |
| 14) - 8.04 -8.4 |
| 15) -0.5 -0.55 |
| Practice |  |

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| Chapter 6 | Integers and the Coordinate Plane | | | |
| Date: | Lesson 6.4 Absolute Value | | | |
| Essential Question | How can you describe how far an object is from sea level? | | | |
| Vocab | Absolute Value is the distance between the number and 0. The absolute value of b is written |b|.  Example: | | | |
| Practice  Find the absolute value. | 1) |-6| = | | 2) = | |
| 3) |0| = | | 4) |3.8| = | |
| Practice  Compare. Write <, >, or = between the values. | 5)  |-8| |-9| | 6)  7 |-14| | | 7)  -|6| -8 |
| Practice  Order the numbers from least to greatest. | 8) - 4, |- 17|, 8, |5|, - 1, |- 6| | | | |
| 9) |0|, |- 26|, - 23, |3|, - 29, |- 7| | | | |
| Practice | 9) The table shows the elevation of several animals.  a) Which animal is the deepest?  b) is the shark or the sea lion closer to sea level? Explain.   |  |  | | --- | --- | | Animal | Elevation (ft) | | Shark | -4 | | Sea lion | 5 | | Seagull | 56 | | Shrimp | -65 | | Turtle | -22 | | | | |

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| Chapter 6 | Integers and the Coordinate Plane | |
| Date: | Lesson 6.5 The Coordinate Plane | |
| Essential Question | How can you graph and locate points that contain negative numbers in a coordinate plane? | |
| Vocab | |  |  |  | | --- | --- | --- | | Word | Definition | Example | |  | a horizontal number line |  | |  | a vertical number line |  | | Coordinate Plane | the intersection of the x axis and the y axis |  |  |  |  |  | | --- | --- | --- | | Quadrant 2: x axis is negative and y axis is positive (-, +)  Quadrant 3: x axis and y axis are both negative (-, -) |  | Quadrant 1: x axis and y axis are both positive (+, +)  Origin is where the x axis and y axis intersect (0, 0)  Quadrant 4: x axis is positive, y axis is negative (+, -) | | |
| What is an Ordered Pair? | x, y is an ordered pair.  The x coordinate moves \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  The y coordinate moves \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| Practice  1 – 4  Write the ordered pair for each point. Describe each point’s location.  5 – 8  Graph and describe the location of each point. | 1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. B \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. C \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. D \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. G (0, 5) \_\_\_\_\_\_\_\_\_\_\_\_ 2. H (5, -3) \_\_\_\_\_\_\_\_\_\_\_ 3. J (-2, 4) \_\_\_\_\_\_\_\_\_\_\_\_ 4. K (6, 0) \_\_\_\_\_\_\_\_\_\_\_\_ |
| Chapter 6 | Integers and the Coordinate Plane | |
| Date: | Lesson 6.5 Ext: Reflecting Points in the Coordinate Plane | |
| Essential Question | How do you reflect points in a coordinate plane? | |
| Reflect in the x axis | Keep the x coordinate, take the opposite of y coordinate  Example: (- 8, 4) reflects to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| Practice  Reflect the point in the x axis. | 1) Reflect (5, - 4) on the x axis. | 2) Reflect (- 4, 8) on the x axis. |
| Reflect in the y axis | Keep the y coordinate, take the opposite x coordinate  Example: (- 3, 6) reflects to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

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| Practice  Reflect the given point in the y axis | 3) Reflect (3,2) in the y axis. | 4) Reflect (-1, 5) in the y axis. |
| Reflect in both the x axis and the y axis | Take the opposite of both the x and y coordinates.  Example: (- 7, 5) reflects to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| Practice | 5) Reflect (2, 5) in the x axis followed by the y axis. | 6) Reflect (3, -1) in the x axis followed by the y axis. |