Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_HW#**15**

**HW: Test Review: Integers and Order of Operations**

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| **1.)** Which of the following comparisons is NOT true?A. 4 > -6 C. -10 < -9B. 0 > -12 D. -3 > 1 | **2.)** Which of the following integers is between -5 and -10?A. 8 C. -8B. -4 D. 9 |
| **3.)** Which of the following sets of integers is in order from least to greatest?A. -1, 4, -3, 0, 5B. 0, -1, -3, 4, 5C. -3, -1, 0, 4, 5D. -1, -3, 4, 5, 0 | **4.)** Which of the following sets of integers is in order from least to greatest?1. 9, -8, 7, -6, 5
2. -8, -6, 5, 7, 9
3. 5, -6, 7, -8, 9
4. 7, -8, -6, 9, 5
 |
| **5.)** Below is a list of temperatures for different cities. Which list shows the cities in order from coldest to warmest (least to greatest)?

|  |  |
| --- | --- |
| City | Temperature (°F) |
| Anchorage, AK | -32 |
| Little Rock, AR | 25 |
| Houston, TX | 68 |
| New York City, NY | -3 |

A. Anchorage, New York City, Little Rock, HoustonB. New York City, Little Rock, Anchorage, HoustonC. Houston, Little Rock, Anchorage, New York CityD. Little Rock, New York City, Houston, Anchorage |
| **6.)** What is the opposite of 10? | **7.)** What is the opposite of -15? | **8.)** Simplify the following.$$\left|-5\right|=$$ | **9.)** Simplify the following.$$\left|5-8\right|=$$ | **10.)** Simplify the following.$$-\left|-15\right|=$$ |
| **11.)** Meisy earned $8 from helping her mom and found $7 in her piggy bank. She owes Victoria $4. Which expression would help Meisy find out how much money she has?A. 8 + 7 + 4 C. 8 + 7 + (-4)B. 8 + (-7) + 4 D. (-8) + (-7) + 4 | **12.)** Karim walked up 6 flights of stairs and then walked down 5 flights of stairs. Which expression could you use to find out where Karim is now?1. 6 + 5 C. (-6) + 5
2. 6 + (-5) D. (-6) + (-5)
 |
| **13.)** A school gains and loses students each year, as shown in the table below. Which expression could be used to find the total change in students?

|  |  |  |
| --- | --- | --- |
| Year | Students gained | Students lost |
| 2008 | 35 | 45 |
| 2009 | 82 | 70 |

1. 35 + (-45) + 82 + (-70)
2. 35 + 45 + (-82) + (-70)
3. 35 + 45 + 82 + 70
4. (-35) + 45 + (-82) + (-70)
 |
| **14.)** What is 8 + (-3)? 1. 5 C. -5
2. 11 D. -11
 | **15.)** What is (-9) + (-7)?A. 2 C. -2 B. 16 D. -16 |
| **16.)** What is 6 – 10?1. 4 C. -4
2. 16 D. -16
 | **17.)** What is -4 – (-9)?A. 5 C. -5 B. 13 D. -13 |
| **18.)** What is (-3) x 12?1. 4 C. -4
2. 36 D. -36
 | **19.)** What is (-15) x (-5)?A. 3 C. -3 B. 75 D. -75 |
| **20.)** What is 12 ÷ (-6)?1. 2 C. -2
2. 72 D. -72
 | **21.)** What is (-36) ÷(-9)?A. 4 C. -4 B. 12 D. -12 |
| **22.)** The temperature started at -6°F. Overnight, the temperature dropped 10 degrees. What was the lowest temperature overnight?1. 4°F C. -4°F
2. 16°F D. -16°F
 | **23.)** Kelly had $45 in her bank account. She went to two different stores and spent $15 and $40. What is her new balance?A. 100 C. -100 B. 10 D. -10 |

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| **24.)** Solve the following:$$6÷3+4∙3÷2=$$ | **25.)** Solve the following:$$7^{2}-2∙5+16$$ |
| **26.)** Solve the following:$$\frac{8+2∙5}{10-12}$$ | **27.)** Solve the following:$$3+(-10+4∙6)$$ |

**28.)** What is the additive inverse of$-6$?

1. $\frac{1}{6}$ c) – $\frac{1}{6}$
2. 6 d) – 6

**29.)** Evaluate each expression when w = 2, x = 24, y = – 6 and z = – 4

**a)** $x ÷y=$ \_\_\_\_\_ **b)**$ z÷w=$ \_\_\_\_\_ **c)** $\frac{y}{w}=$ \_\_\_\_

**30.)** Evaluate each expression when a = – 1 , b = 18, c = – 6 and d = 3

**a)** $b ÷d=$ \_\_\_\_\_ **b)**$ \frac{c}{ d}=$\_\_\_\_\_ **c)**$ \frac{d}{a}=$ \_\_\_\_\_

**31.)** Evaluate each expression when x = 4, y = – 3 and z = 5

**a)**$ x • y=$ \_\_\_\_\_ **b)**$ zx=$ \_\_\_\_\_ **c)** $z•(x+y)=$ \_\_\_\_\_

**32.)** Evaluate each expression when a = – 1 , b = 5 and c = – 6

**a)** $a •b=$ \_\_\_\_\_ **b)**$ bc=$ \_\_\_\_\_  **c)** $ c•(a+b)=$ \_\_\_\_\_

**For #33 - #40, fill in the blank with either “positive” or “negative”.**

**33.)** When both integers are positive, the product is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**34.)** When one integer is positive and one is negative, the product is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**35.)** When both integers are negative, the product is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**36.)** When both integers are positive, the quotient is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**37.)** When both integers are negative, the quotient is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**38.)** When one integer is positive and one is negative, the quotient is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**39.)** The sum of two positive integers is always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**40.)** The sum of two negative numbers is always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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| **41.)** A scuba diver is 180 ft. below sea level and rises to the surface of at a rate of 30 ft/min. How long will the diver take to reach the surface?  | **42.)** The temperature in Ft. Lauderdale, Florida falls 2 degrees per hour for 6 hours overnight. If the temperature was 87 degrees to start, what is the new temperature? |

**43.)** Explain in your own words how to add two integers with different signs.