1 Nate purchased hot dogs in packages of 8 and hot dog buns in packages of 10. If he purchased the same number of hot dogs as buns, what is the smallest number of hot dogs he could have purchased?

A. 16
B. 18
C. 40
D. 80

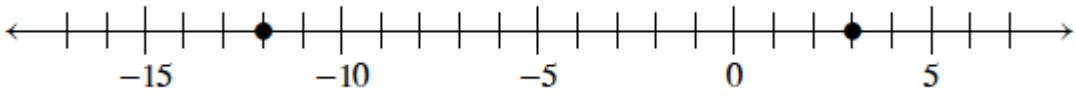
2 Using the number line, choose the inequality that is true.


A. E > C
B. H > D
C. G > C
D. E > 0

3 One of the lowest elevation points on Earth is Death Valley (United States) at 252 feet below sea level. Which of the following locations shows an elevation that is lower than Death Valley?

A. Salton Sea (United States), -227 ft.
B. Valdes Peninsula (Argentina), -131 ft.
C. Qattara Depression (Egypt), -435 ft.
D. Shoshone (United States), 1585 ft.

4 Darla drew a number line in her notebook. Darla wrote $|3| > |-12|$. Is she correct?




A. No, because -12 is to the right of 3 on a number line.
B. No, because 3 units from zero < 12 units from zero.
C. Yes, because 3 > -12.
D. Yes, because any positive number is greater than any negative number.

5 Which operation would be performed first in the following expression?

**4 + 12 ÷ 3 x 2 – 1 + 10**

A. 4 + 12
B. 3 x 2
C. 12 ÷ 3
D. 2 – 1

6 Evaluate the numerical expression:

**$(10 - 4 \times 2)^3 \div 2 + 10$**

A. 874
B. 154
C. 28
D. 14

7 Use the given values to evaluate the expression below.

m=6 and n=4

$$\frac{mn}{2}$$

A. 32
B. 12
C. 5
D. 22

8 Apply the distributive property to 24x + 18y to produce an equivalent expression.

A. 24(x + 18y)
B. 18(24x + y)
C. 6(4x + 3y)
D. 42(x + y)

9 Nancy earns $7.50 an hour. Which expression shows what she will earn working ***h*** hours?

A. 7.5 + h
B. 7.5 – h
C. 7.5h
D. $\frac{h}{7.5}$

10. Gloria has ***b*** red balloons and 14 green balloons. Write an expression to represent how many total balloons Gloria has.

A. 14b
B. b + 14
C. 14 – b
D. b – 14

11 Solve the following equation for ***m***

m + 3.5 = 9

A. m = 6.5
B. m = 5.5
C. m = 12.5
D. m = 4.4

12 Which of the following is one way to find the value of ***a*** in the equation below?

a ÷ 16 = 3

A. 16 + 3 = a
B. 16 * 3 = a
C. 16 –3 = a
D. 16 ÷ 3 = a

13 Which equation represents the relationship between time, ***t***, and distance, ***d***, in the table below?

| Time (t) | Distance (d) |
|---|---|
| 0 | 0 |
| 1 | 65 |
| 2 | 130 |
| 3 | 195 |
| 4 | 260 |

A. d = 65t
B. t = 65d
C. d = t + 65
D. d = t + 1

14 On Saturday, Will worked at the Apple Store for 6 hours. He makes $12.25 per hour plus a sales bonus of $18.65. He makes a total of ***y*** dollars that day. What does ***y*** equal?

A. y = $92.15
B. y = $86.35
C. y = $78.75
D. y = $96.35

Key:

| Item # | Correct Choice |
|---|---|
| 1 | C |
| 2 | C |
| 3 | C |
| 4 | B |
| 5 | C |
| 6 | D |
| 7 | B |
| 8 | C |
| 9 | C |
| 10 | B |
| 11 | B |
| 12 | B |
| 13 | A |
| 14 | A |

# Assessment Matrix- 6th Grade Mid-Year Assessment

| Standard Number | Standard | Item # | Mastery |
|---|---|---|---|
| **6.NS.B.4** (Unit 6A) | Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. | 1 | |
| **6.NS.C.7.A** (Unit 6A) | Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. | 2 | |
| **6.NS.C.7.B** (Unit 6A) | Write, interpret, and explain statements of order for rational numbers in real-world contexts. | 3 | |
| **6.NS.C.7.D** (Unit 6A) | Distinguish comparisons of absolute value from statements about order. | 4 | |
| **6.EE.A.1** (Unit 6B-1) | Write and evaluate numerical expressions involving whole-number exponents. | 5, 6 | |
| **6.EE.A.2.C** (Unit 6B-1) | Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). | 7 | |
| **6.EE.A.3** (Unit 6B-1) | Apply the properties of operations to generate equivalent expressions. | 8 | |

| | | | |
|---|---|---|---|
| **6.EE.B.6** (Unit 6B-2) | Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. | 9.10 | |
| **6.EE.B.7** (Unit 6B-2) | Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which $p$, $q$ and $x$ are all nonnegative rational numbers. | 11,12 | |
| **6.EE.C.9** (Unit 6B-2) | Use variables to represent two quantities in a real world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation | 13, 14 | |