**Standardized Test Practice- Linear Functions**

**Read each question. Then fill in the correct answer on the answer document provided by your teacher or on a sheet of paper.**

 **1.** Which statement is true about the slope of line *RT*?



 **A.** The slope is the same between any two points.

 **B.** The slope between point *R* and point *S* is greater than the slope between point *S* and point *T*.

 **C.** The slope between point *R* and point *T* is greater than the slope between point *S* and point *T*.

 **D.** The slope is positive.

 **2.** A truck used 6.3 gallons of gasoline to travel 107 miles. How many gallons of gasoline would it need to travel an additional 250 miles?

 **F.** 8.4 gallons

 **G.** 14.7 gallons

 **H.** 18.9 gallons

 **I.** 21.0 gallons



 **3. GRIDDED RESPONSE** The cost of a pair of inline skates is $63. If the inline skates are on sale for 35% off, what is the sale price of the inline skates in dollars?

**4.** Which of the following is the graph of *y* = $\frac{3}{4}$*x* + 2?

 **A. C.**





 **B. D.**







**5. SHORT RESPONSE** What are the slope and *x*- and *y*-intercepts of the equation below?

 3*x* – 6*y* = 18

**6.** The table below shows how much Heather pays to rent DVDs.

|  |  |
| --- | --- |
| **Number****of DVDs** | **Cost ($)** |
| 2 | 5 |
| 4 | 10 |
| 6 | 15 |
| 8 | 20 |

 Which of the following expressions can be used to find the total cost of renting any number *n* of DVDs?

 **F.** 5*n* **H.** 5*n* – 2

 **G.** 2.5*n* **I.** 2.5*n* – 2



**7. GRIDDED RESPONSE** What is the product of the fractions below?

$\frac{3}{5}$ • $\frac{10}{12}$

**8.** The equation *c* = 0.8*t* represents *c*, the cost of *t* tickets on a ferry. Which table contains values that satisfy this equation?

 **A.**

|  |
| --- |
| **Cost of Ferry Tickets** |
| ***t*** | 1 | 2 | 3 | 4 |
| ***c*** | $0.80 | $1.00 | $1.20 | $1.40 |

 **B.**

|  |
| --- |
| **Cost of Ferry Tickets** |
| ***t*** | 1 | 2 | 3 | 4 |
| ***c*** | $0.80 | $1.60 | $2.40 | $3.20 |

 **C.**

|  |
| --- |
| **Cost of Ferry Tickets** |
| ***t*** | 1 | 2 | 3 | 4 |
| ***c*** | $0.75 | $1.50 | $2.25 | $3.00 |

 **D.**

|  |
| --- |
| **Cost of Ferry Tickets** |
| ***t*** | 1 | 2 | 3 | 4 |
| ***c*** | $1.80 | $2.60 | $3.40 | $4.20 |



**9. GRIDDED RESPONSE** The slope of the line shown below is $\frac{4}{5}$.



 What is the value of *n*?

**10.** What is the solution of the system of equations below?

 *y* = *x* – 4

 *y* = 3*x*

 **F.** (3, 4) **H.** (–2, –6)

 **G.** (–3, 4) **I.** (2, 6)

**11.** What does the slope of the line in the graph below represent?



 **A.** total number of sandwiches purchased

 **B.** total cost of one sandwich

 **C.** total cost of any number of sandwiches

 **D.** None of the above



**12. EXTENDED RESPONSE** The table below shows the admission rates at the local aquarium.

|  |  |
| --- | --- |
| **Ticket** | **Price ($)** |
| Adult | 15 |
| Child | 9 |

 ***Part A*** Mr. Reilly spent $90 on tickets to the aquarium. Write an equation in standard form to represent the situation.

 ***Part B*** What are the *x*- and *y*-intercepts of the function? What do they represent?

 ***Part C*** Write the equation from Part **A** in slope-intercept form.

 ***Part D*** Graph the equation on a coordinate plane.

 ***Part E*** What is the slope of the line? What does the slope represent?