1. What is the Next and Now that describes the sequence? -3, 1, 5, 9, …
2. Define the explicit form given table of a carnival game:

|  |  |
| --- | --- |
| Number (n) of balls thrown | Total cost |
| 1 | $5.00 |
| 2 | $6.50 |
| 3 | $8.00 |
| 4 | $9.50 |

1. Given the two way table, choose which statement below is false.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Number of siblings** | | |  |
| **0** | **1** | **2** | **total** |
| **Girls** | 5 | 10 | 12 | 27 |
| **Boys** | 7 | 13 | 9 | 29 |
| **total** | 12 | 23 | 21 | 56 |

* 1. The number of boys in the survey is more than the number of students with two siblings.
  2. Ten percent of students that are girls have one sibling.
  3. The percent of only children that are boys is about 58%.
  4. The percent of girls in the survey is about 48%.

1. Given the relative frequency table, which statement below is true if there are 80 students who took the test total?

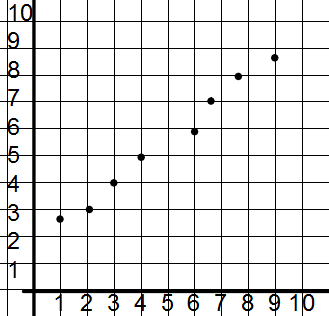
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **English Test** | | |  |
| **Class 1** | **Class 2** | **Class 3** | **total** |
| **Passed** | .3 | .35 | .25 | .9 |
| **Failed** | .0 | .05 | .05 | .1 |
| **total** | .3 | .4 | .3 | 1.0 |

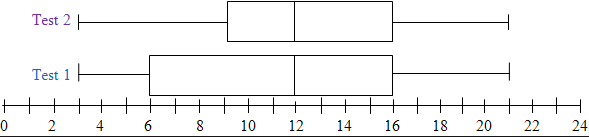
* 1. Five students from class 3 failed the test.
  2. 28 students from class 2 passed the test.
  3. 90 students passed the test total.
  4. 4 students are in class 2.

1. Given the table below, what percent of students were more than 5 points away from their predicted average from the line of best fit?

|  |  |  |
| --- | --- | --- |
| **Name** | **Study Time** | **Actual Score on Test** |
| Sarah | 40 minutes | 95 |
| Joel | 10 minutes | 60 |
| Gabby | 20 minutes | 72 |
| Lawrence | 65 minutes | 100 |
| Robert | 42 minutes | 85 |

* 1. 20%
  2. 25%
  3. 35%
  4. 40%

1. What statement properly describes that scatter plot below?
   1. The graph displays a strong negative correlation.
   2. The graph displays a strong positive correlation.
   3. The graph displays a weak negative correlation.
   4. The graph displays a weak positive correlation.
2. What statement is NOT true comparing the two box and whisker plots?



* 1. Both Box and Whisker plots have a minimum at 3.
  2. The median of Test one is 12.
  3. The first quartile of Test 1 is higher than the first quartile of Test 2.
  4. The third quartiles are the same for both graphs.

1. What is the approximate perimeter of the triangle with the given vertices A(-1, 3), B(3, 1), and C(1 , -3).
   1. 15 units
   2. 18 units
   3. 20 units
   4. 25 units
2. If B is the midpoint between points A(1, 4) and C(3, 8) and E is the midpoint between points D(3, -1) and F(5, 1) what is the approximate distance of BE?
   1. 4 units
   2. 5 units
   3. 6 units
   4. 7 units
3. A rectangle has an area of . What is a possible side length?
   1. 4x - 1
   2. 4x2 + 1
   3. 16x -1
   4. 1 - 4x
4. A cylinder has a diameter of 8 inches and a height of 10 inches, what is the volume rounded to the nearest tenth?
   1. 499.3 in2
   2. 502.7 in2
   3. 2010.6 in2
   4. 402.1 in2