**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_**

**ANSWER KEY**

**BOX QUIZ 15**

**Answer the following questions and show all work.**

|  |  |
| --- | --- |
| **Given the integers 45 and 99:**  (a) Write the prime factorization  of 45.  45 = 3 x 3 x 5  45 = 32 \* 5  (b) Write the prime factorization  of 99.  99 = 3 x 3 x 11  99 = 32 \* 11 | **Given the integers 45 and 99:**  (c) Find GCF(45,99).    = 3 x 3  GCF(45,99) = 9  (d) Find LCM (45,99).    = 3 x 3 x 5 x 11  LCM(45,99) = 495 |
| **Solve and show work:**  What is the final cost of a pair of headphones that are listed for $150 with a 20% discount and 8% tax?    100 x = 3000 100 x = 960  x = 30 x = 9.60  150 – 30 = 120 120 + 9.60=  FINAL COST = $129.60 | ***Venn Diagram:*** Out of 62 students, 19 are taking Math, 31 are taking English and 7 students are in both Math and English.  (a) Draw Venn diagram.  19  24  12  7  (b) How many students are taking only Math class?  12 students  (c) How many students are taking only English class?  24 students  (d) How many students are in neither class?  19 students |