

Standards addressed by these problems: 4.NBT.4 (see linked document regarding a standard algorithm)

Overall purpose of these problem types: *Students will use their understanding of base ten to solve multi-digit addition/subtraction problems within 100,000. Possible problems that can be used to address are JRU, JCU, JSU, SRU, SCU, PPW-WU, PPW-PU.*

(NOTE: Any of these problems can be used as a pre/post test or ongoing assessment of students' understanding.)

JRU (Join-Result Unknown)/Add To Result Unknown:

Maria has _____ dollars saved up to buy a car. For her birthday her mom gave her _____ more dollars. How much money does Maria have altogether?

(3,000; 3,000) (3,000; 3,010) (6,100; 700) (1,610; 175)

Jace and his family were taking a trip to Hawaii. They will fly in two different airplanes to get there. On the first flight, they flew _____ miles. The second flight, they travelled _____ more miles. How many miles did they travel in total?

(2,575; 3,399) (1,199; 2,101) (3,500; 1,199) (2,501; 2,299)

There are _____ people that attended the first Razorback football game. _____ people attended the second Razorback football game. How many people attended the first two Razorback football games?

(68,200; 78,300) (75,250; 79,300) (80,250; 68,310) (63,250; 78,360)

During the fair, Cristin popped a gigantic amount of kernels of corn. On Monday, she popped _____ kernels of corn. On Tuesday, she popped _____ more kernels of corn. How many kernels of corn did Cristin pop altogether?

(16,400; 18,500) (242,420; 183,500) (10,425; 8,420) (16,485; 25,526)

JCU (Join-Change Unknown)/Add To Change Unknown:

Cori had _____ grains of rice in her kitchen. How many more grains of rice does she need to have _____ grains of rice altogether?

(15,200; 30,450) (20,200; 28,499) (35,299; 60,499) (28,698; 41,000)

Maddox and his grandfather planned a huge camping trip at Table Rock Lake. In the morning they walked _____ steps. At noon they stopped to eat lunch. After lunch, they walked some more steps. Maddox and his grandfather walked a total of _____ steps. How many steps did they walk minutes after lunch?

(10,120; 21,240) (12,170; 26,240) (11,170; 23,330) (11,169; 23,330)

SRU (Separate-Result Unknown)/Take From Result Unknown:

Hobby Lobby has _____ beads in their craft collection. They sold _____ beads last month. How many beads does Hobby Lobby have left?

(8,300; 7,100) (23,350; 15,100) (38,350; 21,150) (48,350; 13,199)

Wal-Mart purchased many pencils to sell during the back to school season. After the first week of sales they had sold _____ pencils. They had started with _____ pencils in the beginning. How many pencils do they have left to sell?

(12,100; 25,000) (16,150; 20,000) (23,350; 37,700) (83,359; 100,805)

Chuck-E-Cheese Pizza makes a large amount of pepperoni pizzas. ____ pepperonis were ordered. On Saturday, ____ pepperonis were used to make pizzas. How many pepperonis were left?

(5,500; 4,100) (22,450; 16,100) (30,450; 19,120) (19,400; 12,120)

There were ____ leaves on the trees in the forest. A strong gust of wind blew ____ leaves off of the trees. How many leaves are left on the trees?

(189,700; 54,200) (165,780; 105,210) (335,795; 179,225) (458,750; 228,275)

SCU (Separate-Change Unknown)/Take From Change Unknown:

Mars Company makes a large number of M&Ms each year. They made some M&Ms in 2010. They made ____ more M&Ms in 2011. Mars Company had made ____ M&Ms in total for 2010 and 2011. How many M&Ms did they make in 2010?

(250,302; 500,550) (225,285; 400,500) (205,325; 455,625) (251,375; 449,650)

During Elliot's birthday party they played team Laser Tag. The team played for an hour and earned some points. Then, Elliot and his friends took a break to eat pizza. After they ate the pizza, the team played for another two hours and earned ____ points. They earned ____ points altogether. How many Laser Tag points did the team earn before they ate pizza?

(60,150; 120,500) (224,375; 140,834) (90,100; 143, 415) (115,165; 149,326)

Wal-Mart got a new shipment of ____ erasers for the start of the school year. They sold many erasers right away. There were only ____ erasers left after the first week of sales. How many erasers did they sell that first week?

(450, 45; 250,18) (458,45; 250,150) (775,150; 500, 76) (100,25; 695, 78)

Pesnall Elementary School has ____ box tops. The school spent some of the box tops on a new swing for the playground. Pesnall Elementary now has ____ box tops left. How many box tops were used to get the new swing set?

(100, 48; 128, 8) (125,105; 48,15) (265,152; 199, 50) (269,195; 199,19)

PPW-WU (Part-Part-Whole, Whole Unknown)/Put Together Take Apart, Total Unknown:

The Arkansas Razorbacks played against LSU in November. There were ____ Razorback fans and ____ LSU fans. How many fans were there altogether?

(47,500; 38,500) (54,499; 52,499) (65,750; 30,225) (50,798; 49,275)

Rogers Public Library has a large quantity of books. There are ____ fantasy books, ____ realistic fiction books, and ____ fairy tales. How many fiction books does the library have altogether?

(12,100; 16,800; 14,100) (26,100; 33,110; 28,110) (18,110; 15,105; 17,101) (23,110; 16,105; 20,108)

All of the fourth grade students in Arkansas set an accelerated reading goal for the school year. Before winter break, the fourth graders had earned ____ AR points. At the end of the school, they had earned another ____ AR points. How many AR points did they earn during the school year?

(18,300; 24,400) (27,300; 22,490) (48,320; 56,520) (45,320; 58,590)

PPW-PU (Part-Part-Whole, Part Unknown)Put Together Take Apart, Addend Unknown:

During the Benton County Fair, lots of red and blue tickets were sold. They sold ____ tickets altogether. ____ of the tickets were red and the rest were blue. How many of the tickets were blue?

(300,25; 150,15) (300, 26; 159,15) (715,39; 225, 118) (911, 150; 499,89)