**Teacher Created Number Line Problems**

**Kinder**

1. Use a number line to solve the following problem:

Four students were playing blocks on the carpet. How many more students can join them before the area is full with 7 students?

|  |
| --- |
|  |
|  |

1. Given a number line with only the zero and the 10 noted, put in the missing points and numbers. How many numbers did you write?

10

0

|  |
| --- |
|  |
|  |

1. Nine students were on the playground. 2 sat down to rest. How many are still on the playground?  Use a number line to solve this problem.

|  |
| --- |
|  |
|  |

1. Roll the dice. Place a marker on that number on the number line. How many more would you need to reach 10?

0 1 2 3 4 5 6 7 8 9 10

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

1. There are 32 students in the class. If 8 are absent, how many students are in the class? Show me how to do this on the number line.

|  |
| --- |
|  |
|  |

1. 32 students are in our class but 5 students are absent today. Use the number line to find out how many students are here today.
   1. 27 students are here today but we are supposed to have 32 students. Use the number line to find out how many students are absent today.

|  |
| --- |
|  |
|  |

1. There are 7 apples in the tree.  A bear ate 3 of them.  How many apples are left? Use the number line to solve the problem.

|  |
| --- |
|  |
|  |

1. The bunny started on the number line at number 8.  He hopped 9 numbers forward.  What number did he land on?

|  |
| --- |
|  |
|  |

1. There are 3 Bassett hounds playing in the park.  2 Dalmatians join them.  Use the number line to show how many dogs are playing in the park altogether.

|  |
| --- |
|  |
|  |

1. Ahmad said that the arrow on the number line should be at 5.  Is he correct.  Explain why you agree or disagree with Ahmad.

1

10

|  |
| --- |
|  |
|  |

1. Using the number line, determine which number is missing. Tell how you know.

0 4 5 7 8 9 10

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

1. Use the number line to count to 100 by tens. Then count from 100 to 10 using the number line. How many numbers did you write on the number line?

100

10

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |  |
|  |  |  |  |  |  |  |  |  |  |

1. I am going on a picnic.   I want to invite my friends to the picnic. I want to invite Mary, Mike, and Polly to my picnic. How many students will be at my picnic?  Use the number line to show your thinking.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

1. At a shape party, 10 squares arrived with 5 circles.

Show on a number line how many shapes came to the party.

|  |
| --- |
|  |
|  |

1. I was given six erasers from Joe.  I was given ten erasers from Mary. I already had two erasers.    Show on a number line how many erasers I have now.

|  |
| --- |
| 0  20 |
|  |

1. Using the following ten frames 10 + 8. Show on the number line starting at 10 how you find how many more 18 is from 10.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x | x | x | x | x |
| x | x | x | x | x |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x | x | x | x | x |
| x | x | x |  |  |

|  |
| --- |
|  |
|  |

1. Mrs. Tahara made a dozen cookies. Her family ate 5 cookies. Show on the number line how many cookies are left.

|  |
| --- |
|  |
|  |

1. Using the number line, solve the following problem.  Jose had three tickets and Donzel gave him five more tickets.  How many does he have in all?

|  |
| --- |
|  |
|  |

1. Mark had ten stickers.  He gave some to Kate.  He now has seven stickers.  Use a number line to show how many stickers Mark gave to Kate.

|  |
| --- |
|  |
|  |

1. Jenny has 17 marbles in 2 bags. The first bag has 10 marbles. How many marbles are in the second bag? Use the number line to solve.

|  |
| --- |
|  |
|  |

1. Students will count forward beginning from a given number within the known sequence,

|  |
| --- |
|  |
|  |

**First grade**

1. Using the number line provided and two different color crayons show that 7 + 3 and 3 + 7 both equal 10.

|  |
| --- |
|  |
|  |

1. Jenny needs 25 Scholar Dollars to buy a book. She already has 17 Scholar Dollars. How many more Scholar Dollars does she need? Use the number line to show your thinking.

|  |
| --- |
|  |
|  |

1. Harry had 75 dogs, 27 dogs ran away,  How many dogs does Harry have left?  Show your work on a number line.

|  |
| --- |
|  |
|  |

1. Ms. Jang has 9 students.  The next day, 3 more students joined her class.  Finally, 7 more joined her class.  How many students does she have now?  Use a number line to show your work.

|  |
| --- |
|  |
|  |

1. Kai is 8 years old, his sister is 3 years old, how many years older is Kai than his sister?  Use the number line to solve this problem.

|  |
| --- |
|  |
|  |

1. Ms. Z's class is going on a field trip today.  Thirty-three students are enrolled in room 18 but there are 3 students missing.  How many students will be getting on the bus today for the field trip? How do you know if you are correct?    Use the number line as a tool to solve this problem.

|  |
| --- |
|  |
|  |

1. Gina has 20 erasers.  She gives 5 to Sam and 5 to Lisa.  Use a number line to show how many erasers she has left?

|  |
| --- |
|  |
|  |

1. Nicholas has 20 friends who call him by the name Nicholas, and he has 8 friends who call him by the name Nick.  Use a number line to show how many friends Nicholas has in all.

|  |
| --- |
|  |
|  |

1. There are 83 students in the cafeteria.  Their teachers ask them to sit in groups of 10.  How many groups will there be?  How many students will won't be in a group of 10?  Use a number line to show your reasoning.

|  |
| --- |
|  |
|  |

1. There are 48 pencils in a box. We passed 10 pencils out to the class. Use your number line to show how many pencils are left?

|  |
| --- |
|  |
|  |

1. Susie and Billy had a picnic.  Susie brought 5 oranges.  Billy brought 2 less than Susie.  Using a number line, find how many oranges Billy brought.

|  |
| --- |
|  |
|  |

1. Bob had some cookies. He ate 5 of them. He had 2 left. How many cookies did he start with?

|  |
| --- |
|  |
|  |

1. There were 18 frogs in the pond. 7 hopped out. How many frogs are in the pond now? Use the number line to show how you found your answer.

|  |
| --- |
|  |
|  |

1. Peter wants 30 cupcakes for his party. He has 20. How many more will he need to buy?

|  |
| --- |
|  |
|  |

1. Start on a number line at 0. Roll a die to determine how many spaces you will move on the number line. To win this game, you must land on 10 (and 10 only) in three moves. What are the different ways can you roll a die 3 times to get to 10? (e.g. roll a 3, 4, and 3)

0 1 2 3 4 5 6 7 8 9 10

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

1. Use a number line to solve this problem.

Mister Brown brought home 21 tasty frog tacos. Mrs. Brown snuck in and ate 7 of the tacos. How many frog tacos are left for Mister Brown?

|  |
| --- |
|  |
|  |

1. Tony has three pennies and three dimes.  Use the number line to show how much money he has all together.

|  |
| --- |
|  |
|  |

1. Use the number line to solve the problem: Heidii and Lily went to the apple farm. Heidii picked 20 apples and put them in the basket. Lily fell down the hill. She found 8 apples and put them in the basket. How many apples are in the basket all together?

|  |
| --- |
|  |
|  |

1. Juan had 18 marbles and he gave some away.  Now he has 7 marbles.  How many did he give away?

|  |
| --- |
|  |
|  |

**Second grade**

1. Using a number line put these numbers in order from least to greatest:  575 and 557.

|  |
| --- |
|  |
|  |

1. Ahmad said that he had 53 marbles.  He lost some.  Now he has 41 marbles.  Show using the number line how many he lost.

100

0

|  |
| --- |
|  |
|  |

1. Bennami has 35 Bobcat tickets.  Susan has 209 Bobcat tickets.  How many more Bobcat tickets does Susan have than Bennami?  Solve this problem using a number line.

|  |
| --- |
|  |
|  |

1. There are 64 crayons in the box.  Sixteen were lost.  How many crayons are left in the box?  Use the number line to solve this problem.

|  |
| --- |
|  |
|  |

1. What is the distance between 75 and 108? Use a number line to solve.

|  |
| --- |
|  |
|  |

1. What 3 numbers come before 78?  Show your answer on a number line.

|  |
| --- |
|  |
|  |

1. Can you name 5 numbers that are greater than 243 but less than 252?  How about 352 and 356? why or why not? Use a number line to solve?

|  |
| --- |
|  |
|  |

1. Zahiyyah sold balloons at the fair.  She started her day with 316 balloons. She ended her day with 275. How many balloons did she sell?  Use a number line to show your thinking.

|  |
| --- |
|  |
|  |

1. Today there are 27 students in Room 5, and 30 students in Room 4.  How many students are there all together?  Use the number line to solve.

|  |
| --- |
|  |
|  |

1. Use the blank number line to create 4 equal sections. Show how you would mark and label each section with fractions.

|  |
| --- |
|  |
|  |

1. Use the number to prove the following number sentence.

125<152

|  |
| --- |
|  |
|  |

1. There are 24 ducks sitting in the pond. Some flew away. Now are there 16 ducks left. How many ducks flew away? Using the number lines, show 2 different ways to solve this problem.

|  |
| --- |
|  |
|  |

|  |
| --- |
|  |
|  |

1. The team scores 20 points in the first quarter of the game.  They score ten points in each of the next 3 quarters.  Use a number line to determine what their score would be at the end of the game.  (To make the problem more challenging you could start with another number and still have them count on by tens, or change the number scored in each quarter to count on by other numbers.)

|  |
| --- |
|  |
|  |

1. Johnny and Maggie are having a play day.  Johnny brings 7 toys and Maggie brings 16 toys.  How many more toys does Maggie have than Johnny?  How many more toys does Johnny need to have the same amount as Maggie?  How many toys do they have altogether?

|  |
| --- |
|  |
|  |

1. Use an open number line to find the solution to this problem.

Maggie has 139 balloons for her party. 29 of them popped. How many balloons does she have left?

|  |
| --- |
|  |
|  |

1. Stella and Lucy have been collecting dimes .They have 8 dimes. How many suckers can they buy if the cost of each one is 20 cents? Use the number line to show how many suckers they can buy.

50

0

100

|  |  |
| --- | --- |
|  |  |
|  |  |

1. Larry had a collection of 36 rocks.  Then his dad gave him some more.  Now he has 50 rocks.  How many rocks did his dad give him?

|  |
| --- |
|  |
|  |

1. Jennifer has some stickers.  Mary gives her 14 more stickers.  Now she has 25 stickers.  How many stickers did she have to begin with?

|  |
| --- |
|  |
|  |

1. Robin had 21 jolly ranchers and her mom gave her ten more jolly ranchers.  How many jolly ranchers does she have in all?

|  |
| --- |
|  |
|  |