

DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES

Level 2 (Year 3-4)
Copy Masters,
Number and
Algebra

Task 1 – Group Task

Solve the equations. What do you notice?

$$30 + 10 =$$

$$26 + 20 =$$

$$54 + 30 =$$

$$39 - 10 =$$

$$99 - 10 =$$

Represent your thinking using an empty number line.

Task 1 – Independent Tasks

Solve the following problems:

$$40 + 20 =$$

$$36 + 20 =$$

$$55 + 40 =$$

$$78 + 10 =$$

$$89 - 20 =$$

What patterns do you notice?

Task 2 – Group Task

What do you notice?

$$26 + 12 =$$

$$54 + 35 =$$

$$39 - 15 =$$

Represent your thinking using equations and an empty number line.

Task 2 - Independent Tasks

Solve these problems:

$$33 + 11 =$$

$$23 + 25 =$$

$$44 + 35 =$$

$$48 - 16 =$$

$$56 - 12 =$$

$$68 - 25 =$$

Task 3 – Group Task

Rena collected 56 stickers. She gave 24 stickers to her friend. How many stickers does Rena have left?

Kelly collected 99 stickers. She gave 73 stickers to her friend. How many stickers does Kelly have left?

Asa collected 168 stickers. She gave 31 stickers to her friend. How many stickers does Asa have left?

Task 3 - Independent Tasks

May-Lee had 88 beads. She made a necklace for her cousin and used 56 beads. How many beads does May-Lee have left over?

Beth had 37 beads. She made a necklace for her cousin and used 21 beads. How many beads does Beth have left over?

Dakota had 56 beads. She made a necklace for her cousin and used 32 beads. How many beads does Dakota have left over?

Task 4 – Group Task

Monty is sorting his blocks into colours. He has 56 blue blocks and 19 red blocks. How many blocks does Monty have altogether?

Jason is sorting his blocks into colours. He has 39 yellow blocks and 38 white blocks. How many blocks does Jason have altogether?

Pauli is sorting his blocks into colours. He has 27 black blocks and 25 orange blocks. How many blocks does Pauli have altogether?

Task 4 - Independent Tasks

Dallas and Vegas collected acorns in the playground. Dallas has 18 acorns and Vegas has 46. How many acorns do they have altogether?

Roman and Elias collected acorns in the playground. Roman had 59 acorns and Elias had 38. How many acorns do they have altogether?

Jack and Jill collected acorns in the playground. Jack has 65 acorns and Jill has 27. How many acorns do they have altogether?

Task 5 – Group Task

Manu was helping at the sausage sizzle. They cooked 56 sausages and sold 18 sausages. How many sausages do they have left over?

Sepi was helping at the sausage sizzle. They cooked 32 sausages and sold 19 sausages. How many sausages do they have left over?

Don was helping at the sausage sizzle. They cooked 74 sausages and sold 17 sausages. How many sausages do they have left over?

Task 5 - Independent Tasks

Ana had 41 loom bands. She used 17 to make a bracelet for her friend. How many loom bands does she have left?

Tina has 28 loom bands. She used 19 to make a bracelet for her friend. How many loom bands does she have left?

Sam has 52 loom bands. She used 26 to make a bracelet for her friend. How many loom bands does she have left?

Task 6 – Group Task

Nana had 16 plums. She asked Sela to pick some more plums. Now she has 45 plums. How many plums did Sela pick?

Aunty had 24 feijoas. She asked Tama to pick some more. Now Aunty has 51 feijoas. How many feijoas did Tama pick?

Dad counted 44 nails in his toolbox. He found some more in the garage. Now he has 72 nails. How many nails did Dad find in the garage?

Task 6 - Independent Tasks

Uncle had 22 feijoas in one bag and 14 feijoas in another bag. How many feijoas does uncle have altogether?

Mona picked 54 strawberries and her cousin picked some more. Now they have 92 strawberries. How many did cousin pick?

Mere has 37 pink beads in one bag. She also has some yellow beads in another bag. Altogether she has 76 beads. How many yellow beads does she have?

Task 7 – Group Task

Solve the following problems:

$$56 - 17 =$$

$$83 - 38 =$$

$$54 + 37 =$$

$$139 + 26 =$$

Task 7 - Independent Tasks

Solve the problems below:

$$63 - 19 =$$

$$45 - 26 =$$

$$82 - 57 =$$

$$43 + 118 =$$

$$112 + 98 =$$

Use an empty number line and equations to show how you have solved them.

Task 8 – Group Task

Solve the following problems:

$$121 - 18 =$$

$$94 - 37 =$$

$$153 - 49 =$$

Task 8 - Independent Tasks

Solve the following problems:

$$83 - 65 =$$

$$161 - 29 =$$

$$183 - 69 =$$

$$85 - 47 =$$

Represent your thinking using equations and on an empty number line.

Task 9 – Group Task

Are these number sentences true or false? Justify your thinking.

$$188 = 188$$

$$99 + 255 = 256 + 99$$

$$78 = 50 + 28$$

$$29 + 30 = 59 + 8$$

$$34 - 19 = 33 - 18$$

$$250 = 261$$

$$28 + 26 = 29 + 25$$

Task 9 - Independent Tasks

Solve the following problems:

$$126 + 57 =$$

$$122 - 72 =$$

$$74 + 168 =$$

$$137 + 85 =$$

$$192 - 65 =$$

Task 10 – Group Task

Can you find the missing numbers?

$$8 + 6 = \underline{\quad} + 5$$

$$35 + 19 = 36 + \underline{\quad}$$

$$19 + \underline{\quad} = 17 + 25$$

$$\underline{\quad} + 86 = 19 + 85$$

Task 10 - Independent Tasks

Are these number sentences true or false? Be ready to explain and justify your thinking.

$$76 = 86 - 10$$

$$118 + 47 = 48 + 117$$

$$96 - 5 - 2 = 96 - 7$$

$$176 - 87 = 177 - 88$$

$$15 + 18 = 14 + 17$$

Task 11 – Group Task

Find the missing numbers:

$$23 - 17 = \underline{\quad} - 15$$

$$46 - 28 = 45 - \underline{\quad}$$

$$\underline{\quad} - 36 = 71 - 26$$

$$143 - \underline{\quad} = 43 - 29$$

Task 11 - Independent Tasks

Find the missing numbers:

$$18 + 15 = \underline{\quad} + 16$$

$$\underline{\quad} + 27 = 14 + 29$$

$$22 - \underline{\quad} = 23 - 17$$

$$64 - 38 = 62 - \underline{\quad}$$

$$157 + 178 = \underline{\quad} + 168$$

$$\underline{\quad} - 67 = 253 - 167$$

Use arrows to show your thinking.

Task 12 – Group Task

Jonty said “When you are adding two numbers together, it doesn’t matter which order you use to add them, the answer will be the same”.

Work in a group and explore whether you agree or disagree with this statement.

Can you prove that it works for all numbers?

Does what Jonty said also work for subtraction, multiplication, and division?

Task 12 - Independent Tasks

Find the missing numbers:

$$46 - 18 = \underline{\quad} - 16$$

$$67 - 49 = \underline{\quad} - 48$$

$$\underline{\quad} - 25 = 63 - 15$$

$$193 - \underline{\quad} = 93 - 29$$

Task 13 – Group Task

If $136 + 287 = 423$

Then $287 + 136 =$

$423 - 136 =$

$423 - 287 =$

What patterns do you notice? Does this always work?

Write your own sets of addition and subtraction equations that use the same patterns.

Task 13 - Independent Tasks

Solve the following problems:

$$27 + 125 =$$

$$156 - \underline{\quad} = 13$$

$$\underline{\quad} + 72 = 188$$

$$13 + 155 =$$

$$50 = \underline{\quad} + \underline{\quad}$$

$$46 = \underline{\quad} + \underline{\quad}$$

$$52 + 19 =$$

$$36 + 152 =$$

Task 14 – Group Task

The following number sentence is true:

$$72 - 57 = 15$$

Is $72 - 57 - 8 = 15 - 8$ true or false?

Is $72 - 57 + 36 = 15 + 34$ true or false?

How do you know?

Do you think this will work for other numbers? Can you explain why or why not?

Can you write your own examples with other numbers where this relationship works?