## Two-step Addition and Subtraction Problem Solving Answers

Target Number
Answers may vary.
What's the Number?

| $\boldsymbol{+}$ | $\mathbf{1 8}$ | $\mathbf{2 4}$ | $\mathbf{5 6}$ | $\mathbf{7 5}$ | $\mathbf{9 9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 7}$ | 35 | $\mathbf{4 1}$ | 73 | $\mathbf{9 2}$ | 116 |
| $\mathbf{3 9}$ | 57 | $\mathbf{6 3}$ | 95 | 114 | 138 |
| $\mathbf{5 1}$ | $\mathbf{6 9}$ | 75 | $\mathbf{1 0 7}$ | 126 | $\mathbf{1 5 0}$ |
| $\mathbf{1 1 2}$ | 130 | 136 | $\mathbf{1 6 8}$ | 187 | $\mathbf{2 1 1}$ |


| - | 13 | $\mathbf{1 6}$ | $\mathbf{2 2}$ | $\mathbf{3 4}$ | 56 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 46 | 43 | 37 | 25 | 3 |
| 78 | 65 | $\mathbf{6 2}$ | 56 | 44 | 22 |
| $\mathbf{1 0 6}$ | 93 | 90 | $\mathbf{8 4}$ | 72 | 50 |
| 168 | 155 | 152 | 146 | 134 | $\mathbf{1 1 2}$ |

Reverse the Digits
Answers may vary.

## That's Odd!

| Subtraction calculation | or X | Correction |
| :---: | :---: | :---: |
| $126-85=49$ | $X$ | $126-85=41$ |
| $532-162=379$ | $X$ | $532-162=370$ |
| $832-645=187$ | $X$ | $322-173=149$ |
| $322-173=156$ | $X$ |  |


| $269-232=28$ | $\mathbf{X}$ | $\mathbf{2 6 9 - 2 3 2 = 3 7}$ |
| :---: | :---: | :---: |
| $495-375=130$ | $\mathbf{X}$ | $495-\mathbf{3 7 5}=\mathbf{1 2 0}$ |
| $653-475=178$ | $X$ | $174-69=105$ |
| $174-69=115$ | $X$ |  |

## Higher or Lower

Answers may vary.

## What's the Problem?

1. The principal wanted to know the total number of students in school on Monday afternoon. Class 1 had 23, class 2 had 29, Class 3 had 27, and Class 4 had 30. How many students were at school?

## 109 students

If Class 2 went to the park for the last hour of the afternoon, how many students were at school then?

## 80 students

2. Oscar was collecting football stickers. The full set was 375 stickers. He already had 255 stickers in his collection at home and collected 38 more at school. How many more did he have to collect to complete the set?
375-255-38=82.
3. I have counted the colored pencils from three classes. There are 450, 356, and 220 . How can I add these totals together? Show me as many strategies as you can. Which do you prefer?
Please change to: You can use expanded form:
Hundreds: $400+200+300=900$
Tens: $50+50+20=120$
Ones: 6
Total: 1,026

## Two-step Addition and Subtraction Problem Solving

## Target Number

Write a four-digit number over 1,000. Find as many ways as possible to add two numbers together or subtract two numbers to total your target number.

Here is an example: $\mathbf{1 , 1 5 9}$ is the target number.
$\mathbf{1 , 1 5 9}=1,150+9145+1,014=\mathbf{1 , 1 5 9} 1,287-128=\mathbf{1}, 1591,265-106=\mathbf{1 , 1 5 9}$

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

## What's the Number?

Find the missing numbers in these addition and subtraction squares.

| + | $\mathbf{1 8}$ |  | 56 | 75 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 7}$ | 35 |  | 73 |  | 116 |
|  | 57 |  | 95 | 114 | 138 |
| $\mathbf{5 1}$ |  | 75 |  | 126 |  |
|  | 130 | 136 |  | 187 |  |


| - | 13 |  | 22 | 34 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 46 |  | 37 | 25 |  |
| 78 | 65 |  | 56 |  | 22 |
|  | 93 | 90 |  | 72 |  |
| $\mathbf{1 6 8}$ |  | 152 | 146 | 134 |  |

## Reverse the Digits

Choose a number less than 100. Reverse the digits. Then subtract the smaller number from the larger one to find the difference. Here is an example:
4723 is $3274.4723-3274=1449$.
Choose 11 more numbers to complete the table.

| $4723-3274=1449$ |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

## Fix It

Your teacher needs some help marking the math books. Check and correct (if necessary) these subtraction calculations to help.

| Subtraction calculation | / or X | Correction |
| :---: | :---: | :---: |
| $126-85=49$ | X | $\mathbf{1 2 6 - 8 5 = 4 1}$ |
| $532-162=379$ |  |  |
| $832-645=187$ |  |  |
| $322-173=156$ |  |  |
| $269-232=28$ |  |  |
| $495-375=130$ |  |  |
| $653-475=178$ |  |  |
| $174-69=115$ |  |  |

## Higher or Lower

You will need dice for this activity.
Roll the dice eight times. Record a digit in each place value box to make the sum as low as possible.


Change the order of the digits to make the sum as high as possible.


## What's the Problem?

1. The principal wanted to know the total number of students in school on Monday afternoon. Class 1 had 23, class 2 had 29, Class 3 had 27, and Class 4 had 30. How many students were at school?

If Class 2 went to the park for the last hour of the afternoon, how many students were at school then?
2. Oscar was collecting football stickers. The full set was 375 stickers. He already had 255 stickers in his collection at home and collected 38 more at school. How many more did he have to collect to complete the set?
3. I have counted the colored pencils from three classes. There are 450,356 , and 220 . How can I add these totals together? Show me as many strategies as you can. Which do you prefer?

## Two-step Addition and Subtraction Problem Solving Answers

## Target Number

Answers may vary.
What's the Number?

| $\boldsymbol{+}$ | $\mathbf{5}$ | $\mathbf{7}$ | $\mathbf{1 3}$ | $\mathbf{4 2}$ | $\mathbf{5 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{6}$ | 11 | $\mathbf{1 3}$ | 19 | $\mathbf{4 8}$ | 57 |
| $\mathbf{8}$ | 13 | $\mathbf{1 5}$ | 21 | 50 | 59 |
| $\mathbf{9}$ | $\mathbf{1 4}$ | 16 | $\mathbf{2 2}$ | 51 | $\mathbf{6 0}$ |
| $\mathbf{1 5}$ | 20 | 22 | $\mathbf{2 8}$ | 57 | $\mathbf{6 6}$ |


| - | $\mathbf{4}$ | $\mathbf{1 3}$ | $\mathbf{1 9}$ | $\mathbf{2 7}$ | $\mathbf{3 8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{4 3}$ | 39 | 30 | $\mathbf{2 4}$ | 16 | $\mathbf{5}$ |
| $\mathbf{4 7}$ | 43 | $\mathbf{3 4}$ | 28 | $\mathbf{2 0}$ | 9 |
| $\mathbf{5 9}$ | 55 | 46 | $\mathbf{4 0}$ | 32 | $\mathbf{2 1}$ |
| $\mathbf{6 4}$ | $\mathbf{6 0}$ | 51 | 45 | 37 | $\mathbf{2 6}$ |

Reverse the Digits
Answers may vary.
That's Odd!

| 23 | 4 | 11 | 93 | 65 | 13 | 87 | 50 | 92 | 53 | 2 | 96 | 3 | 77 | 81 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 66 | 27 | 77 | 64 | 32 | 63 | 4 | 34 | 79 | 74 | 8 | 47 | 10 | 51 |
| 7 | 31 | 83 | 35 | 47 | 12 | 13 | 22 | 72 | 51 | 82 | 64 | 83 | 64 | 37 |
| 19 | 28 | 73 | 15 | 82 | 10 | 49 | 84 | 58 | 73 | 6 | 40 | 27 | 26 | 5 |
| 39 | 16 | 91 | 27 | 33 | 55 | 33 | 59 | 91 | 51 | 99 | 1 | 3 | 9 | 63 |

## What's the Problem?

| Problem | + + | + - | - + | -- | Calculation | Solve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| There are 32 children in the lunch queue. Another 12 join the queue, then another 7. | $\checkmark$ |  |  |  | $32+12+7$ | 51 |
| I have $\$ 2.00$ in my purse. I spend 45 cents on a book and 25 cents on a pencil. How much money do I have now? |  |  |  | $\sqrt{ }$ | $\begin{gathered} \$ 2.00- \\ \$ 0.45-\$ 0.25 \end{gathered}$ | \$1.30 |
| There are 32 children on the school bus. Then, 6 children get off, and another 13 get on. |  |  | $\checkmark$ |  | 32-6+13 | $\begin{gathered} 39 \\ \text { children } \end{gathered}$ |
| I add 36 to 45, then subtract 41. |  | $\sqrt{ }$ |  |  | 36+45-41 | 40 |
| I sew 12 buttons on my sweater. Then, 7 fall off, and I sew another 4 on. |  |  | $\sqrt{ }$ |  | 12-7+4 | $\begin{gathered} 9 \\ \text { buttons } \end{gathered}$ |
| I eat 12 chips before lunch and 16 chips after lunch. Bob eats 5 chips too. | $\checkmark$ |  |  |  | $12+16+5$ | $\begin{gathered} 33 \\ \text { chips } \end{gathered}$ |
| My pencil is 6 inches long, and then I sharpen 3 inches off. Next, I add a 1 -inch eraser to the end. |  |  | $\checkmark$ |  | 6-3+1 | 4 inches |
| I stack 17 math books in a pile and add another 11 books. Then 14 pupils take their books. |  | $\checkmark$ |  |  | 17+11-14 | $\begin{gathered} 14 \\ \text { books } \end{gathered}$ |
| I have $\$ 4.50$ in my money box. I add this week's pocket money of $\$ 1.50$, then spend $\$ 1.15$ on a comic. |  | $\checkmark$ |  |  | $\begin{gathered} \$ 4.50+\$ 1.50 \\ -\$ 1.15 \end{gathered}$ | \$4.85 |

## Two-step Addition and Subtraction Problem Solving

## Target Number

Write a two-digit number over 50. Find as many ways as possible to add two numbers together to total your target number. Record them in the table.

Here is an example: 59 is the target number.
$59=50+9$
$45+14=59$
$32+27=59$

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

## What's the Number?

Find the missing numbers in these addition and subtraction squares.

| + | 5 |  | 13 | 42 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{6}$ | 11 |  | 19 |  | 57 |
|  | 13 |  | 21 | 50 | 59 |
| 9 |  | 16 |  | 51 |  |
|  | 20 | 22 |  | 57 |  |


| - | 4 |  | 19 | 27 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 43 | 39 | 30 |  | 16 |  |
| 47 | 43 |  | 28 |  | 9 |
|  | 55 | 46 |  | 32 |  |
| 64 |  | 51 | 45 | 37 |  |

## Reverse the Digits

Choose a number less than 100. Reverse the digits. Then subtract the smaller number from the larger one to find the difference. Here is an example:
72 is $27.72-27=45$.
Choose 11 more numbers to complete the table.

| $72-27=45$ |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

## That's Odd!

Color all of the odd numbers to reveal a hidden word. Start on the top row and go down.

| 23 | 4 | 11 | 93 | 65 | 13 | 87 | 50 | 92 | 53 | 2 | 96 | 3 | 77 | 81 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 66 | 27 | 77 | 64 | 32 | 63 | 4 | 34 | 79 | 74 | 8 | 47 | 10 | 51 |
| 7 | 31 | 83 | 35 | 47 | 12 | 13 | 22 | 72 | 51 | 82 | 64 | 83 | 64 | 37 |
| 19 | 28 | 73 | 15 | 82 | 10 | 49 | 84 | 58 | 73 | 6 | 40 | 27 | 26 | 5 |
| 39 | 16 | 91 | 27 | 33 | 55 | 33 | 59 | 91 | 51 | 99 | 1 | 3 | 9 | 63 |

Use squared paper to make up an odd and even number pattern to spell your name.

## What's the Problem?

For each of the word problems, please check the box to show whether you need to add and add, add and subtract, subtract and add, or subtract and subtract. Write the number problem out as a calculation, then solve it. Write your own problem when you have finished.

| Problem | + + | + - | - + | -- | Calculation | Solve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| There are 32 children in the lunch queue. Another 12 join the queue, then another 7. | $\sqrt{ }$ |  |  |  | $32+12+7$ | 51 |
| have $\$ 2.00$ in my purse. I spend 45 cents on a book and 25 cents on a pencil. How much money do I have now? |  |  |  |  |  |  |
| There are 32 children on the school bus. Then, 6 children get off, and another 13 get on. How many children are on the bus now? |  |  |  |  |  |  |
| I add 36 to 45 , then subtract 41 . What number do I have? |  |  |  |  |  |  |
| I sew 12 buttons on my sweater. Then, 7 fall off, and I sew another 4 on. How many buttons are on my sweater now? |  |  |  |  |  |  |
| I eat 12 chips before lunch and 16 chips after lunch. Bob eats 5 chips too. How many chips have been eaten altogether? |  |  |  |  |  |  |
| My pencil is 6 inches long, and then I sharpen 3 inches off. Next, I add a 1 -inch eraser to the end. How long is my pencil now? |  |  |  |  |  |  |

## Two-step Addition and Subtraction Problem Solving Answers

## Target Number

Answers may vary.
What's the Number?

| + | 32 | $\mathbf{6 7}$ | $\mathbf{4 2}$ | 89 | $\mathbf{9 3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{8}$ | 40 | $\mathbf{7 5}$ | 50 | 97 | 101 |
| $\mathbf{5}$ | 37 | $\mathbf{7 2}$ | 47 | 94 | 98 |
| $\mathbf{7}$ | $\mathbf{3 9}$ | 74 | $\mathbf{4 9}$ | 96 | $\mathbf{1 0 0}$ |
| $\mathbf{9}$ | 41 | 76 | $\mathbf{5 1}$ | 98 | $\mathbf{1 0 2}$ |


| - | 15 | $\mathbf{3 3}$ | $\mathbf{4 1}$ | 56 | $\mathbf{6 1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{7 2}$ | 57 | $\mathbf{3 9}$ | 31 | 16 | $\mathbf{1 1}$ |
| $\mathbf{6 4}$ | 49 | $\mathbf{3 1}$ | 23 | $\mathbf{8}$ | 3 |
| $\mathbf{8 4}$ | 69 | 51 | $\mathbf{4 3}$ | 28 | $\mathbf{2 3}$ |
| $\mathbf{9 6}$ | $\mathbf{8 1}$ | 63 | 55 | 40 | $\mathbf{3 5}$ |

## Reverse the Digits

Answers may vary.
It's a Matter of Deduction
Solve the number problems to find the missing numbers.


## What's the Problem?

1. Alex usually walks to and from school every day. It is 1.5 miles from his home to school. One day of the week, he walked from his friend Bill's house, which was 2.3 miles from school, and then back to Bill's house in the afternoon. Another day of the week, he walked from his Grandma's house, which was 1.75 miles from school, and then back to his Grandma's house in the afternoon. One day of the week, he walked from home. One day his dad gave him a ride to school in the morning. One day he stayed at home with a cold. How far did Alex walk during the week?
2.3 miles $\times 2=4.6$ miles 1.75 miles $\times 2=3.5$ miles 1.5 mies $\times 2=3$ miles
1.5 miles $\times 1=1.5$ miles

Total walked $=\mathbf{1 2 . 6}$ miles
2. Danni went to town on Saturday to spend her pocket money. She took $£ 7.95$ with her. She stopped for a coffee which cost $£ 3.75$. Then she bought a book for $£ 2.55$. How much did she come home with?
If the bus fare home would cost her $£ 1.80$, could she afford to catch the bus?
\$7.95-\$3.75-\$2.55 = \$1.65 No
3. As Zac walked along the street, he noticed that the houses on the left-hand side of the street had odd numbers, and the numbers on the right-hand side of the street had even numbers. There were 30 houses on the street. Did the house numbers on the odd side of the street add up to more than the house numbers on the even side? What were the totals?

The even houses added up to more than the odd houses. The odd houses totaled 225, and the even houses totaled 240.

## Two-step Addition and Subtraction Problem Solving

## Target Number

Write a three-digit number over 100. Find as many ways as possible to add two numbers together or subtract two numbers to give your target number. Record them in the table. Here is an example: $\mathbf{1 5 9}$ is the target number.

$$
159=150+9145+14=15932+127=159175-16=159265-106=159
$$

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| + | 32 |  | 42 | 89 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | 40 |  | 50 |  | 101 |
| 7 | 37 |  | 47 | 94 | 98 |
| 7 | 41 | 74 |  | 96 |  |
|  | 76 |  | 98 |  |  |


| - | 15 |  | 41 | 56 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 57 |  | 31 | 16 |  |
| 64 | 49 |  | 23 |  | 3 |
|  | 69 | 51 |  | 28 |  |
| 96 |  | 63 | 55 | 40 |  |

## Reverse the Digits

Choose a number less than 100. Reverse the digits. Then subtract the smaller number from the larger one to find the difference. Here is an example:
472 is $274.472-274=198$.
Choose 11 more numbers to complete the table.

| $472-274=198$ |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

## It's a Matter of Deduction

Solve the number problems to find the missing numbers.


## Higher or Lower

You will need dice for this activity.
Roll the dice six times. Record a digit in each place value box to make the sum as low as possible.


Change the order of the digits to make the sum as high as possible.

$+$

$=$

## What's the Problem?

1. Alex usually walks to and from school every day. It is 1.5 miles from his home to school. One day of the week, he walked from his friend Bill's house, which was 2.3 miles from school, and then back to Bill's house in the afternoon. Another day of the week, he walked from his Grandma's house, which was 1.75 miles from school, and then back to his Grandma's house in the afternoon. One day of the week, he walked from home. One day his dad gave him a ride to school in the morning. One day he stayed at home with a cold. How far did Alex walk during the week?
2. Danni went to town on Saturday to spend her pocket money. She took $£ 7.95$ with her. She stopped for a coffee which cost $£ 3.75$. Then she bought a book for $£ 2.55$. How much did she come home with?
If the bus fare home would cost her $£ 1.80$, could she afford to catch the bus?
3. As Zac walked along the street, he noticed that the houses on the left-hand side of the street had odd numbers, and the numbers on the right-hand side of the street had even numbers. There were 30 houses on the street. Did the house numbers on the odd side of the street add up to more than the house numbers on the even side? What were the totals?
