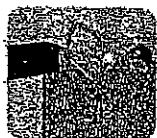


Sum Difference

Cross-Curricular Focus: Mathematics



Did you know that addition and subtraction are related to each other? They are opposites. Yes, they are just like night and day or hot and cold. Addition is able to reverse, or "undo," subtraction. Subtraction is able to reverse, or "undo," addition. Mathematicians have a special word for operations that are the opposite of each other. They call them *inverse operations*. Addition and subtraction are inverse operations. Multiplication and division are also inverse operations.

You can use subtraction to "undo" an addition problem to see if your sum is correct. A sum is the answer to an addition problem. You can also use addition to "undo" a subtraction problem. In this way, you can check to see if your **difference** is correct. The difference is the answer to a subtraction problem. Having a way to check your answer gives you a way to *justify*, or prove, it. If you make an error, you will be able to find it easily.

Some students don't give their work their full attention. That's why students often make silly mistakes on easy problems. Remember to stay focused on the problem you are solving. Check your answer using an inverse operation.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) What is meant by the term *inverse operations*?

2) What is a *sum*?

3) What is a *difference*?

4) What does it mean to *justify* your answer?

5) Why should you keep your attention focused on your work when you solve addition and subtraction problems?

Mixed Practice

Find the sum or difference.

$$\begin{array}{r} 1. \quad 33 \\ + 12 \\ \hline 45 \end{array}$$

$$\begin{array}{r} 2. \quad 64 \\ - 47 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 25 \\ + 57 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 83 \\ - 36 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 46 \\ + 34 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 81 \\ - 17 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 42 \\ - 21 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 12 \\ + 67 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 61 \\ + 29 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 72 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 29 \\ + 41 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 52 \\ - 39 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 31 \\ - 12 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 64 \\ - 18 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 49 \\ + 22 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 75 \\ - 48 \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad 43 \\ + 19 \\ \hline \end{array}$$

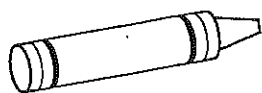
$$\begin{array}{r} 18. \quad 22 \\ + 35 \\ \hline \end{array}$$

$$\begin{array}{r} 19. \quad 32 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 20. \quad 67 \\ + 15 \\ \hline \end{array}$$

Problem Solving

21. Kinzy and Ezra each put 22 crayons in a box. Then they took 9 crayons out of the box and put them into a bucket. How many crayons were left in the box?



crayon _____ crayons