

## Equations

Name \_\_\_\_\_ Date \_\_\_\_\_

1 - What number is the "x" in these equations?

- |                           |                           |
|---------------------------|---------------------------|
| a) $5 + x = 20$           | b) $21 + x = 33$          |
| c) $12 + x = 46$          | d) $20 + 3 + x = 50$      |
| e) $13 + 4 + 5 + x = 28$  | f) $17 + x + 9 + 12 = 62$ |
| g) $8 + x + 13 = 10 + 14$ | h) $5 + 24 + x = 13 + 17$ |
| i) $12 + 3 + x = 26$      | j) $x + 14 + 3 = 26$      |

2 - What number is the "x" in these equations?

- |                          |                         |
|--------------------------|-------------------------|
| a) $7 - x = 3$           | b) $23 - x = 8$         |
| c) $x - 12 = 34$         | d) $63 - x = 5 = 45$    |
| e) $22 - x - 5 = 12 - 2$ | f) $13 - 5 - x = 2 + 4$ |
| g) $14 - 10 - x = 1$     | h) $x - 15 - 12 = 45$   |
| i) $x + 12 - 7 = 14 - 3$ | j) $7 - x = 3 = 14 - 6$ |

3 - Choose the expressions that illustrate each of these situations:

Tom bought 20 candy bars. He gave half to his brother and then some more to his friends. He had 3 in the end.

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|----------------------|----------------------|----------------------|----------------------|
| a) $20 + 10 + 3 = x$ | b) $20 - 10 - 3 = x$ | c) $20 - 10 - x = 3$ | d) $20 - x + 10 = 3$ |
|----------------------|----------------------|----------------------|----------------------|

Jane had five dolls. Her mother added her two more. Her neighbor gave her a bag with more dolls. She had 15 dolls after that.

- |                     |                     |                     |                     |
|---------------------|---------------------|---------------------|---------------------|
| a) $5 + 2 = 15 - x$ | b) $5 + 2 = x - 15$ | c) $15 - 5 - x = 2$ | d) $5 - 2 + x = 15$ |
|---------------------|---------------------|---------------------|---------------------|

4 - Write the equations that illustrate these operations, and then solve them:

- a) Johnny bought a pack of milk bottles. He broke one and drank two. He had 9 bottles left.  
How many bottles were there in the pack?

- b) Mary had ten books. Someone stole some of them. If she was left with 6, how many books were stolen?

- c) Thomas and Lilly bought a computer game. They originally had \$97 and they only had \$19 after the purchase. How much was the computer game?

- d) Mr. Rodgers had a drawer full of scarves. He gave 8 to charity and still had 13 to wear.  
How many scarves did Mr. Rodgers have originally?