



## Two-step equations - word problems - decimals

- 1) A wise man once said, "400 reduced by 3 times my age is 142." What is his age?
- 2) Daniel wanted to make note cards by cutting pieces of paper in half. Before starting he got three more pieces to use. When he was done he had 20 half-pieces of paper. With how many pieces did he start?
- 3) Aliyah spent half of her weekly allowance on candy. To earn more money her parents let her wash the dog for \$8.28. What is her weekly allowance if she ended with \$15.11?
- 4) Sarawong spent half of his weekly allowance playing arcade games. To earn more money his parents let him weed the garden for \$6.55. What is his weekly allowance if he ended with \$11.01?
- 5) Ashley bought a magazine for \$5.76 and three erasers. She spent a total of \$15.24. How much did each eraser cost?
- 6) Trevon spent half of his weekly allowance buying pizza. To earn more money his parents let him clean the windows in the house for \$7.33. What is his weekly allowance if he ended with \$14.87?

- 7) The Cooking Club made some pies to sell during lunch to raise money for an end-of-year banquet. The cafeteria contributed two pies to the club. Each pie was then cut into seven pieces and sold. There were a total of 84 pieces to sell. How many pies did the club make?
- 8) Rob had some paper with which to make note cards. On his way to his room he found two more pieces to use. In his room he cut each piece of paper in half. When he was done he had 22 half-pieces of paper. With how many sheets of paper did he start?
- 9) Jack had some paper with which to make note cards. On his way to his room he found seven more pieces to use. In his room he cut each piece of paper in half. When he was done he had 22 half-pieces of paper. With how many sheets of paper did he start?
- 10) Jasmine sold half of her comic books and then bought six more. She now has 36. With how many did she begin?
- 11) For a field trip 17 students rode in cars and the rest filled six buses. How many students were in each bus if 293 students were on the trip?
- 12) Adam won 59 lollipops playing hoops at the county fair. At school he gave two to every student in his math class. He only has 3 remaining. How many students are in his class?

- 13) Pranav had some paper with which to make note cards. On his way to his room he found six more pieces to use. In his room he cut each piece of paper in half. When he was done he had 24 half-pieces of paper. With how many sheets of paper did he start?
- 14) The sum of three consecutive even numbers is 84. What is the smallest of these numbers?
- 15) The Cooking Club made some pies to sell at a basketball game to raise money for the new math books. The cafeteria contributed four pies to the sale. Each pie was then cut into six pieces and sold. There were a total of 84 pieces to sell. How many pies did the club make?
- 16) 447 students went on a field trip. Eight buses were filled and 15 students traveled in cars. How many students were in each bus?
- 17) Ryan spent half of his weekly allowance on clothes. To earn more money his parents let him clean the gutters for \$6.20. What is his weekly allowance if he ended with \$13.30?
- 18) You bought a magazine for \$4 and three notepads. You spent a total of \$16.30. How much did each notepad cost?

- 19) The Cooking Club made some pies to sell at a basketball game to raise money for the new math books. The cafeteria contributed three pies to the sale. Each pie was then cut into six pieces and sold. There were a total of 78 pieces to sell. How many pies did the club make?
- 20) Danielle had \$20.60 to spend on eight avocados. After buying them she had \$3. How much did each avocado cost?
- 21) Jenny sold half of her comic books and then bought twelve more. She now has 33. With how many did she begin?
- 22) Amy won 76 lollipops playing hoops at her school's game night. Later, she gave three to each of her friends. She only has 10 remaining. How many friends does she have?
- 23) Norachai won 50 pieces of gum playing hoops at his school's game night. Later, he gave three to each of his friends. He only has 2 remaining. How many friends does he have?
- 24) Gabriella sold half of her comic books and then bought ten more. She now has 37. With how many did she begin?

25) DeShawn had some paper with which to make note cards. On his way to his room he found six more pieces to use. In his room he cut each piece of paper in half. When he was done he had 32 half-pieces of paper. With how many sheets of paper did he start?

26) Ted had \$21.60 to spend on five pencils. After buying them he had \$3.60. How much did each pencil cost?

27) Paul's Bikes rents bikes for \$11.50 plus \$7.30 per hour. Jennifer paid \$55.30 to rent a bike. For how many hours did she rent the bike?

28) Maria had \$24.30 to spend on eight pens. After buying them she had \$1.10. How much did each pen cost?

29) The Cooking Club made some pies to sell at a basketball game to raise money for the new math books. The cafeteria contributed three pies to the sale. Each pie was then cut into seven pieces and sold. There were a total of 91 pieces to sell. How many pies did the club make?

30) The Cooking Club made some pies to sell during lunch to raise money for an end-of-year banquet. The cafeteria contributed four pies to the club. Each pie was then cut into four pieces and sold. There were a total of 36 pieces to sell. How many pies did the club make?

## Answers to Two-step equations - word problems - decimals

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|-------------|------------|------------|------------|
| 1) 86       | 2) 7       | 3) \$13.66 | 4) \$8.92  |
| 5) \$3.16   | 6) \$15.08 | 7) 10      | 8) 9       |
| 9) 4        | 10) 60     | 11) 46     | 12) 28     |
| 13) 6       | 14) 26     | 15) 10     | 16) 54     |
| 17) \$14.20 | 18) \$4.10 | 19) 10     | 20) \$2.20 |
| 21) 42      | 22) 22     | 23) 16     | 24) 54     |
| 25) 10      | 26) \$3.60 | 27) 6      | 28) \$2.90 |
| 29) 10      | 30) 5      |            |            |