**Solve for each equation in questions 1-15.**

|  |  |  |
| --- | --- | --- |
| 1. $x+3=7$
 | 1. $4x=32$
 | 1. $\frac{x}{7}=4$
 |
| 1. $8-2x=10$
 | 1. $3x-9=8(x-3)$
 | 1. $\frac{2x+2}{8}=2x+3$
 |
| 1. $\frac{2(x-4)}{5}=12$
 | 1. $2x+6=5-8x$
 | 1. $x=2x+7$
 |

10. The lengths of the sides of a triangle are x, 2x + 1, 5x + 4 inches. If the perimeter is 53 inches, what is the value of x?

11.Sasha spent half of her allowance going to the movies. She mowed her neighbor’s yard and earned 15 dollars. What is her weekly allowance if she ended with 20 dollars?

12. Janet had one hundred and seventy eight dollars to spend on three pairs of shoes. After buying them she had twelve dollars. How much did each pair cost?

13. The sum of two consecutive even integers is 26. What is the smallest integer?

14. The sum of three consecutive even integers is 54. What is the largest integer?

**Solve each of the inequalities and graph them on a number line.**

|  |  |
| --- | --- |
| 15. $x+3\leq -9$ | 16. $-3x>3$ |
| 1. $-x-4x>-10$
 | 1. $6-4(6x+7)\geq 122$
 |
| 1. $8x+2x-16<-5x+7x$
 | 1. $-x-4x>-10$
 |