Short Answer.
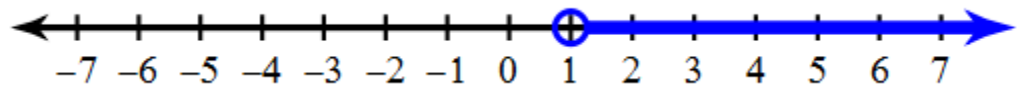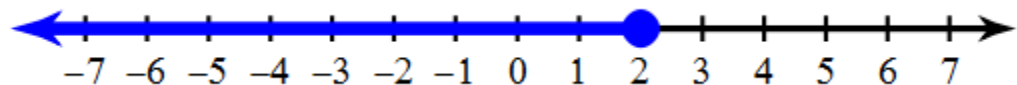1. What operation would be the first one eliminated when solving the following equation: $-5x + 3 = 23$

2. Write a ratio in simplest form comparing 45 minutes with 3 hours.

3. Camp Algebra stocked 310 pounds of food for 80 people. Determine the pounds of food per person at the camp.

4. At a school, the ratio of boys to girls to teachers is 250 to 225 to 85. What is the ratio of boys to teachers in simplest form?

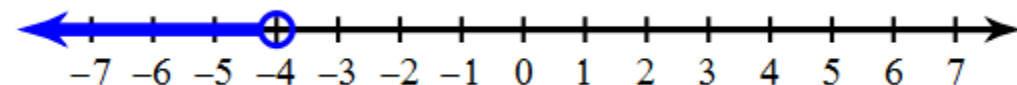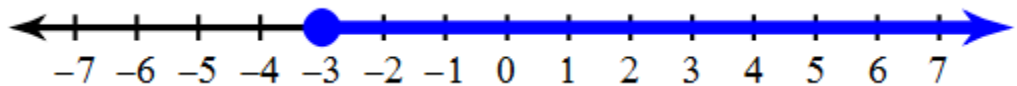*Write the correct interval notation for each graph.*
5.

6.

7.

8.

Solve for x.

9. $7 = 3x - 8$

10. $8x + 2x - 15 = 45$

11. $\frac{x}{2} + \frac{x}{3} - \frac{x}{4} = 21$

12. $7dx - 2d = 3dx + 6d$

13. $5(x + 2) = 6 + 3(2x - 1)$

14. $5x - (x + 3) = 7 + 2(x + 2)$

15. $ax - m = 2m - 10$

16. $\dfrac{3x-5}{2} = \dfrac{5x+1}{4}$

Solve the inequalities and graph the solution set.

17. $6 - 3x \leq -9$

18. $-3 < x - 1 \leq 2$

19. $(-5 + x \leq -4)$ or $(x \leq 4)$

20. $(-6b \leq 60)$ and $(b - 5 < -7)$

Identify the property used at each step in the following solution.

21. $\frac{x}{3} + 7 = 9$ _____

$\frac{x}{3} + 7 - 7 = 9 - 7$ _____

$\frac{x}{3} + 0 = 9 - 7$ _____

$\frac{x}{3} = 9 - 7$ _____

$\frac{x}{3} = 2$ _____

$\frac{x}{3}(3) = 2(3)$ _____

$x(1) = 2(3)$ _____

$x = 2(3)$ _____

$x = 6$ _____