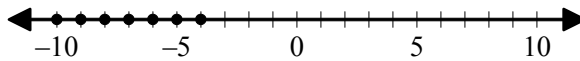


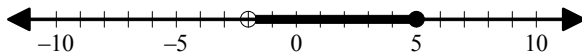
Simplify:

1.  $-2\sqrt{8} - \sqrt{27} + 3\sqrt{2} - 4\sqrt{12}$
2.  $-4\sqrt{5} - 2\sqrt{500} - 6\sqrt{45}$
3.  $5\sqrt{18} - \sqrt{12} + 4\sqrt{2} + 3\sqrt{300}$
4.  $-7\sqrt{7} - 2\sqrt{25} + 5\sqrt{28}$
5.  $\sqrt{2} - \sqrt{200} - 7\sqrt{32}$
6.  $3\sqrt{50} - \sqrt{75} - 5\sqrt{2} - 5\sqrt{27}$
7.  $\sqrt{6} - \sqrt{81} + 2\sqrt{54}$
8.  $-2\sqrt{3} - \sqrt{30,000} - 3\sqrt{27}$
9.  $-2\sqrt{8} - \sqrt{300} + 2\sqrt{2} - 3\sqrt{12}$
10.  $-5\sqrt{7} - 3\sqrt{70,000} - 4\sqrt{28}$
11.  $-6\sqrt{6} - 2\sqrt{60,000} + 9\sqrt{24}$
12.  $\sqrt{144,000,000}$   
[A] 1200                      [B] 72,000,000                      [C] 12,000                      [D] 120
13.  $9\sqrt{3} + 4\sqrt{3} - 4\sqrt{3}$
14. Tom's test grades were 86, 78, 82, and 70. What was his weighted average if the tests were weighted 3, 2, 4, and 5, respectively? Round your answer to the nearest whole number.
15. In the Olympics, the athlete received an 85% score on the compulsory exercises, which were weighted 70%. In the optional round, weighted 30%, the athlete received a 70%. What was the athlete's weighted average?

16. Simplify:  $2\sqrt{7} + 6\sqrt{7} - 2\sqrt{7}$
17. Julian's test scores were 85, 94, 89, and 92. What was his weighted average if the tests were weighted 1, 4, 2, and 3, respectively? Round your answer to the nearest whole number.
18. In the Olympics, the athlete received a 90% score on the compulsory exercises, which were weighted 80%. In the optional round, weighted 20%, the athlete received a 95%. What was the athlete's weighted average?
19. Write an inequality whose solution is the graph shown below. Remember to designate the domain.



20. Write a conjunction that describes this graph. Specify the domain.



21. Graph the following inequality on a number line:  $x + 2 \geq -1$ ;  $D = \{\text{Real numbers}\}$
22. Solve the system by substitution:  
 $5x + y = 6$   
 $-2x - 7y = 57$
23. Solve the system by substitution:  
 $x + y = -1$   
 $6x + y = -6$
24. During the sale, the price of the bicycle was marked down 23 percent. The sale price of the bicycle was \$232. What was the original price of the bicycle?
25. The experimental treatment caused side effects in 54% of those who had it. If 1296 experienced side effects, how many people had the experimental treatment?
26. Anton peeked around the bush and spied 700 elves gathered in the glen. If this was 40 percent more than Petros spied under the tree, how many elves did Petros spy?

27. The number of bacteria increased by 230 percent overnight. If there were 35,000 bacteria yesterday, how many bacteria were present this morning?