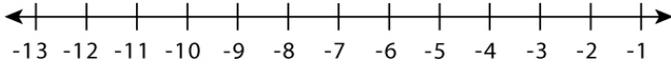# Multi-Step Inequalities
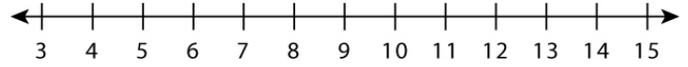
Solve each inequality and graph its solution.
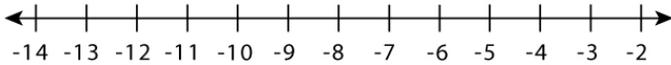
① $-2(2 + 2l) - 2 > 6$

-13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1

② $b - 3 + 4 > 7$

3 4 5 6 7 8 9 10 11 12 13 14 15

③ $-a + 6a \leq 4 + 6a$

-14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2

④ $-(2 + 2c) - 2 > 6$

-13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1

⑤ $4(8 - 2s) - 2s \leq 32$

-5 -4 -3 -2 -1 0 1 2 3 4 5 6 7

⑥ $18 \geq 5k + 4k$

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

⑦ $28 - 7x \leq -4(-7x - 7)$

-4 -3 -2 -1 0 1 2 3 4 5 6 7 8

⑧ $-3(2v - 5) < -13 + v$

2 3 4 5 6 7 8 9 10 11 12 13 14

⑨ $38 + 5y > 7(y + 4)$

3 4 5 6 7 8 9 10 11 12 13 14 15

⑩ $-f < -f + 7(f - 2)$

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6
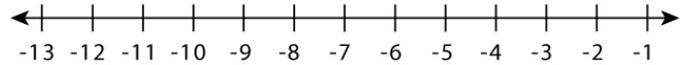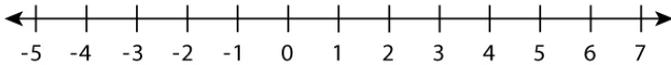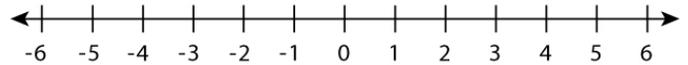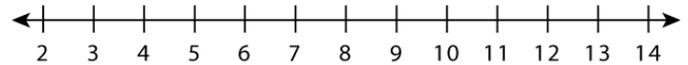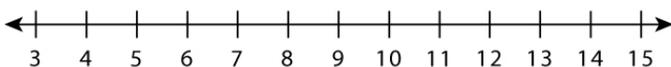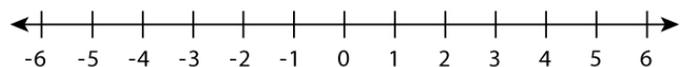
Multi-Step Inequalities

Answers

① -2(2 + 2l) - 2 > 6

l < -3
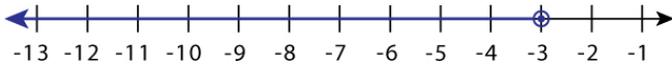
② b - 3 + 4 > 7

b > 6
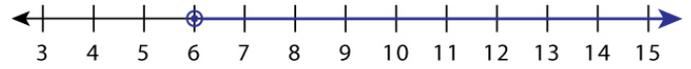
③ -a + 6a ≤ 4 + 6a

a ≥ -4
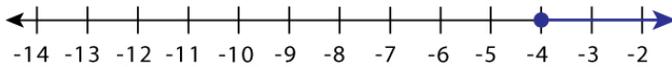
④ -(2 + 2c) - 2 > 6

c < -5
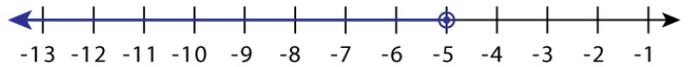
⑤ 4(8 - 2s) - 2s ≤ 32

s ≥ 0

⑥ 18 ≥ 5k + 4k

k ≤ 2
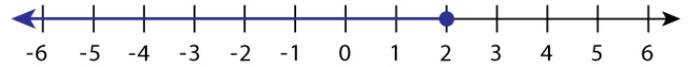
⑦ 28 - 7x ≤ -4(-7x - 7)

x ≥ 0
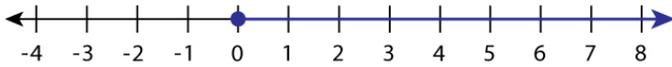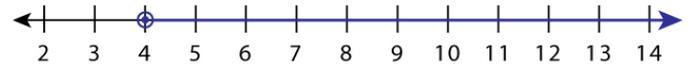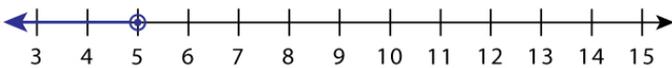

⑧ -3(2v - 5) < -13 + v

v > 4

⑨ 38 + 5y > 7(y + 4)

y < 5

⑩ -f < -f + 7(f - 2)

f > 2