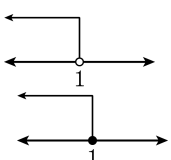
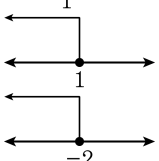
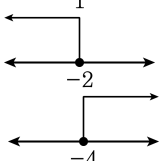
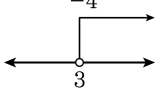
1. 다음은 부등식의 해를 수직선 위에 나타낸 것이다. 옳지 <u>않은</u> 것은?

① $x+3<4$ 

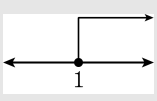
② $2x+1\geq 3$ 

③ $3x+6\leq 0$ 

④ $x+1\geq -3$

⑤ $2x>x+3$ 

해설

② $x\geq 1$ 

2. 다음 그림이 나타내는 해와 같은 해를 갖는 부등식을 모두 고르면?

① $x+1>-2$ ② $3x-2<1$ ③ $2-x\geq 5$

④ $2x+1\leq -5$ ⑤ $-2x+1<7$

해설

① $x>-3$

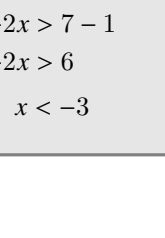
② $3x-2<1$, $3x<3$ 이므로 $x<1$ 이다.

③ $2-x\geq 5$, $-x\geq 3$ 이므로 $x\leq -3$ 이다.

④ $2x+1\leq -5$, $2x\leq -6$ 이므로 $x\leq -3$ 이다.

⑤ $-2x+1<7$, $-2x<6$ 이므로 $x>-3$ 이다.

3. 일차부등식 $-2x+1>7$ 의 해를 수직선 위에 바르게 나타낸 것은?

① 

②

③

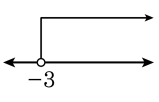
④

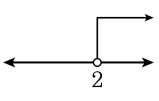
⑤

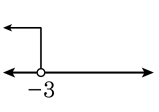
해설

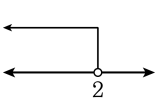
$-2x+1>7$
$-2x>7-1$
$-2x>6$
$\therefore\ x<-3$

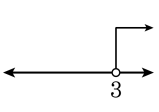
4. 일차부등식 $2(x+1)<6$ 의 해를 수직선 위에 바르게 나타낸 것은?

① 

② 

③ 

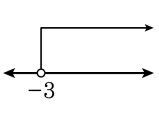
④ 

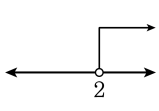
⑤ 

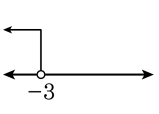
해설

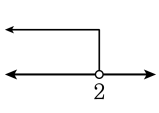
$2(x+1)<6$
$2x+2<6$
$2x<4$
$\therefore\ x<2$

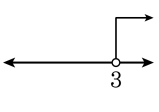
5. 일차부등식 $3x - 5 > 4$ 의 해를 수직선 위에 바르게 나타낸 것은?

① 

② 

③ 

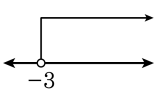
④ 

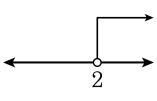
⑤ 

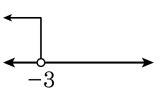
해설

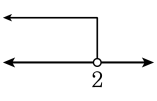
$3x - 5 > 4$
$3x > 4 + 5$
$3x > 9$
$\therefore\ x > 3$

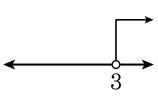
6. 일차부등식 $-2x-4<2$ 의 해를 수직선 위에 바르게 나타낸 것은?

① 

② 

③ 

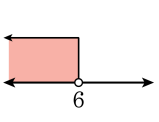
④ 

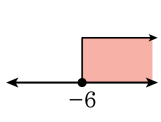
⑤ 

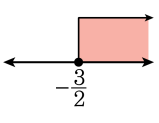
해설

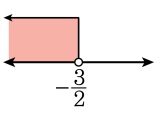
$-2x-4<2$
$-2x<2+4$
$-2x<6$
$\therefore\ x>-3$

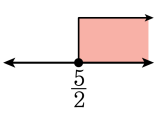
7. 일차부등식 $-\frac{1}{2}x \le 3$ 의 해를 수직선 위에 바르게 나타낸 것은?

① 

② 

③ 

④ 

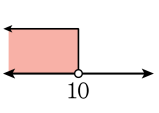
⑤ 

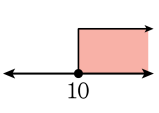
해설

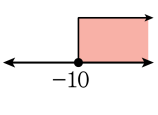
$-\frac{1}{2}x \le 3$

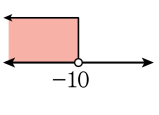
$x \ge -6$

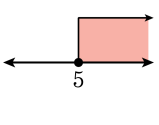
8. 일차부등식 $-\frac{1}{5}x \le 2$ 의 해를 수직선 위에 나타내면?

① 

② 

③ 

④ 

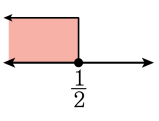
⑤ 

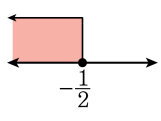
해설

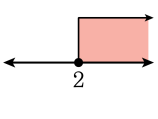
$-\frac{1}{5}x \le 2$

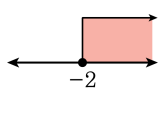
$x \ge -10$

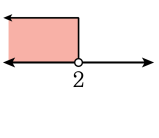
9. 부등식 $-x+1 \le 2x-5$ 의 해를 수직선 위에 옳게 나타낸 것은?

① 

② 

③ 

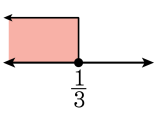
④ 

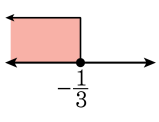
⑤ 

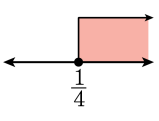
해설

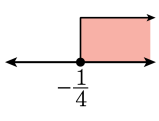
$-x+1 \le 2x-5$
$6 \le 3x$
$\therefore\ 2 \le x$

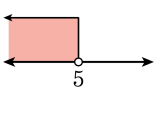
10. 부등식 $-x-1 \le 3x-2$ 의 해를 수직선 위에 나타내면?

① 

② 

③ 

④ 

⑤ 

해설

$-x-1 \le 3x-2$

$1 \le 4x$

$\therefore \ \frac{1}{4} \le x$

11. 다음 그림의 수직선의 빗금 친 부분을 해로 가지는 일차부등식은?

① $3x-2 \geq 1$　② $3x-1 > 2$　③ $2x+1 \leq -3$

④ $2x-1 \leq -1$　⑤ $2x+2 \geq -2$

해설

빗금 친 부분 : $x \geq -2$

① $3x \geq 3 \rightarrow x \geq 1$

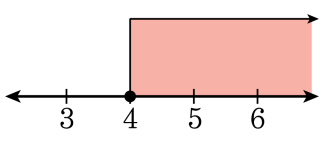
② $3x > 3 \rightarrow x > 1$

③ $2x \leq -4 \rightarrow x \leq -2$

④ $2x \leq 0 \rightarrow x \leq 0$

⑤ $2x \geq -4 \rightarrow x \geq -2$

12. 다음 중 수직선의 빗금 친 부분을 해로 가지는 일차부등식을 모두 골라라.



㉠ $4x-1 \geq 1$
㉡ $2x-8 \geq 0$
㉢ $2x-8 < 0$
㉣ $x-2 < 2$
㉤ $x-2 \geq 2$

▶ 답:

▶ 답:

▷ 정답: ㉡

▷ 정답: ㉤

해설

빗금 친 부분 : $x \geq 4$
㉡ $2x-8 \geq 0 \rightarrow x \geq 4$
㉤ $x-2 \geq 2 \rightarrow x \geq 4$

13. 다음은 어떤 일차부등식을 풀고 그 해를 수직선 위에 나타낸 것이다. 그 부등식은 어느 것인가?

① $2x+6>2$ ② $-3+x\le 2$ ③ $\frac{1}{2}x>3$

④ $-2x\ge -4$ ⑤ $-4x+1>9$

해설

② $x\le 5$
③ $x>6$
④ $x\le 2$
⑤ $x<-2$

14. $4x-1 \geq -7+6x$ 의 해를 수직선 위에 바르게 나타낸 것은?

①

②

③

④

⑤

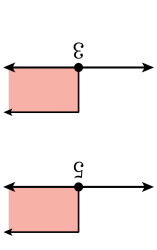
해설

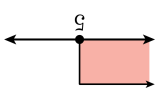
$4x-1 \geq -7+6x$

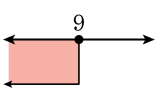
$6 \geq 2x$

$x \leq 3$

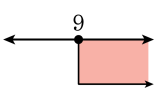
15. $3x+1 \le -5+4x$ 의 해를 수직선 위에 나타내면?

① 

② 

④ 

③

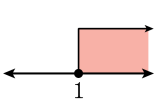
⑤ 

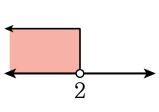
해설

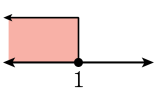
$3x+1 \le -5+4x$

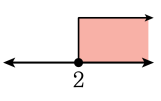
$x \ge 6$

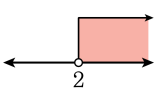
16. 부등식 $-4x+3>-3x+1$ 의 해의 집합을 수직선 상에 옳게 나타낸 것은?

① 

② 

③ 

④ 

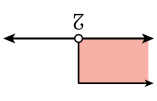
⑤ 

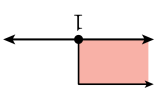
해설

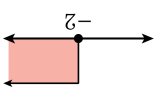
주어진 부등식을 풀면 그 해는 $2>x$ 이다.

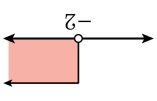
17. 부등식 $2x-2 \le -3x+3$ 의 해를 수직선에 나타낸 것은?

①

② 

③ 

④ 

⑤ 

해설

$2x-2 \le -3x+3$

$5x \le 5$

$\therefore\ x \le 1$

18. 다음 수직선은 어느 부등식의 해를 나타낸 것이다. 다음 중 이 부등식이 될 수 없는 것은?

① $2(x+1) \geq 8$ ② $x-3 \geq 0$ ③ $2-3x \geq -7$

④ $x \geq 3$ ⑤ $-\frac{1}{2}x+4 \leq 2.5$

해설

① $x \geq 3$, ② $x \geq 3$, ③ $3 \geq x$, ④ $x \geq 3$, ⑤ $x \geq 3$

19. 다음 수직선은 어느 부등식의 해를 나타낸 것이다. 다음 중 이 부등식이 될 수 없는 것을 알맞게 고른 것은?

ㄱ. $x+1 \geq 0$
ㄴ. $2x+3 \leq 1$
ㄷ. $x-5 \geq 6$
ㄹ. $2(x+1) \geq 0$
ㅁ. $3x-4 < 2$

① ㄱ, ㄷ ② ㄱ, ㄹ ③ ㄴ, ㄷ
④ ㄴ, ㄷ, ㄹ ⑤ ㄴ, ㄷ, ㅁ

해설

ㄴ. $x \leq -1$
ㄷ. $x \geq 11$
ㅁ. $x < 2$