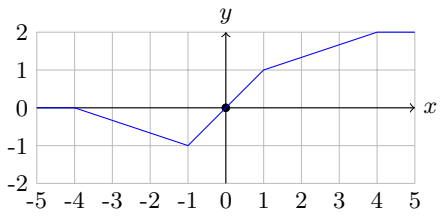
Graphes de fonctions

Questions : Ecrire une alternative multiple qui permette de déterminer $y = f(x)$ pour une fonction f définie par son graphe sur $[-5; 5]$ et $\forall x < -5, f(x) = f(-5)$ et $\forall x > 5, f(x) = f(5)$.

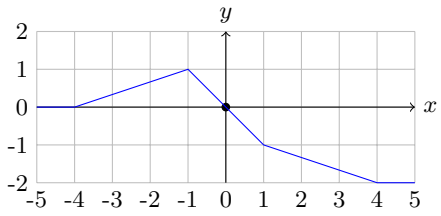
Réponses :

1.



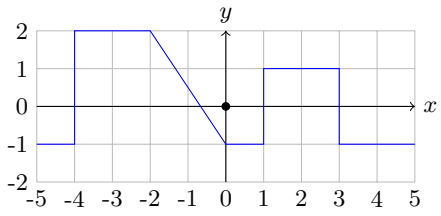

```
if   x < -4 : y = 0
elif x < -1 : y = -x/3 - 4/3
elif x <  1 : y = x
elif x <  4 : y = x/3 + 2/3
else        : y = 2
```

2.



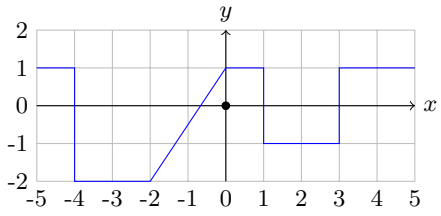

```
if   x < -4 : y = 0
elif x < -1 : y = x/3 + 4/3
elif x <  1 : y = -x
elif x <  4 : y = -x/3 - 2/3
else        : y = -2
```

3.



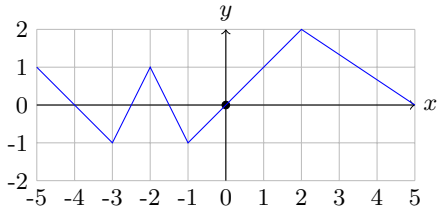

```
if   x < -4 : y = -1
elif x < -2 : y = 2
elif x <  0 : y = -3*x/2 - 1
elif x <  1 : y = -1
elif x <  3 : y = 1
else        : y = -1
```

4.



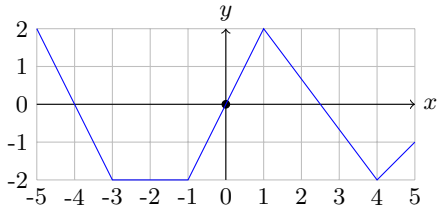

```
if   x < -4 : y = 1
elif x < -2 : y = -2
elif x <  0 : y = 3*x/2 + 1
elif x <  1 : y = 1
elif x <  3 : y = -1
else        : y = 1
```

5.



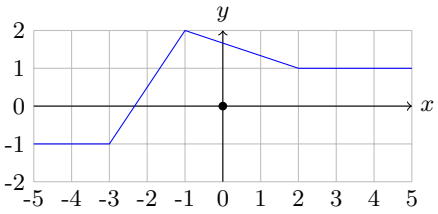

```
if   x < -5 : y = 1
elif x < -3 : y = -x - 4
elif x < -2 : y = 2*x + 5
elif x < -1 : y = -2*x - 3
elif x <  2 : y = x
elif x <  5 : y = -2*x/3 + 10/3
else        : y = 0
```

6.



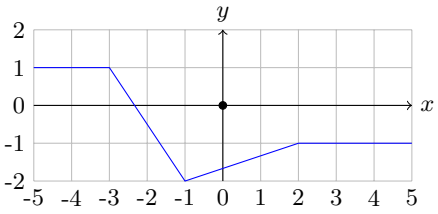

```
if   x < -5 : y = 2
elif x < -3 : y = -2*x - 8
elif x < -1 : y = -2
elif x <  1 : y = 2*x
elif x <  4 : y = -4*x/3 + 10/3
elif x <  5 : y = x - 6
else        : y = -1
```

7.



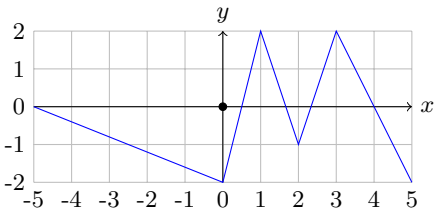
```
if   x < -3 : y = -1
elif x < -1 : y = 3*x/2 + 7/2
elif x <  2 : y = -x/3 + 5/3
else        : y = 1
```

8.



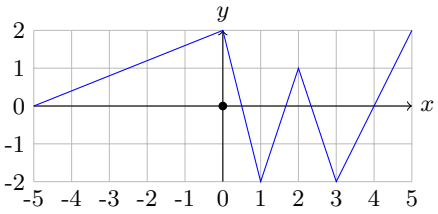
```
if   x < -3 : y = 1
elif x < -1 : y = -3*x/2 - 7/2
elif x <  2 : y = x/3 - 5/3
else        : y = -1
```

9.



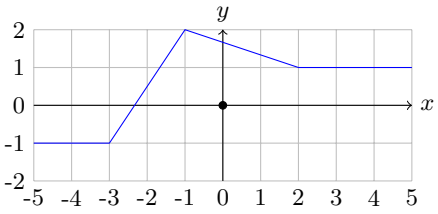
```
if   x < -5 : y = 0
elif x <  0 : y = -2*x/5 - 2
elif x <  1 : y = 4*x - 2
elif x <  2 : y = -3*x + 5
elif x <  3 : y = 3*x - 7
elif x <  5 : y = -2*x + 8
else        : y = -2
```

10.



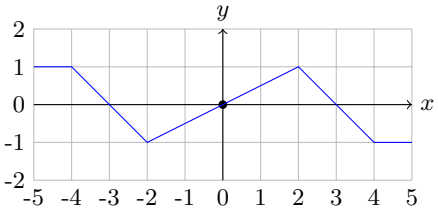
```
if   x < -5 : y = 0
elif x <  0 : y = 2*x/5 + 2
elif x <  1 : y = -4*x + 2
elif x <  2 : y = 3*x - 5
elif x <  3 : y = -3*x + 7
elif x <  5 : y = 2*x - 8
else        : y = 2
```

11.



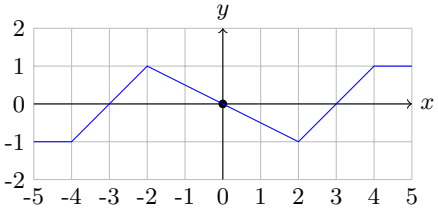
```
if   x < -3 : y = -1
elif x < -1 : y = 3*x/2 + 7/2
elif x <  2 : y = -x/3 + 5/3
else        : y = 1
```

12.



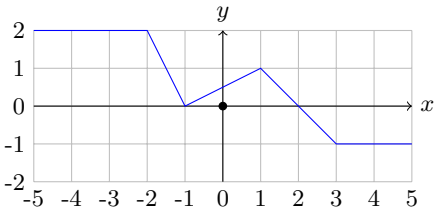
```
if   x < -4 : y = 1
elif x < -2 : y = -x - 3
elif x <  2 : y = x/2
elif x <  4 : y = -x + 3
else        : y = -1
```

13.



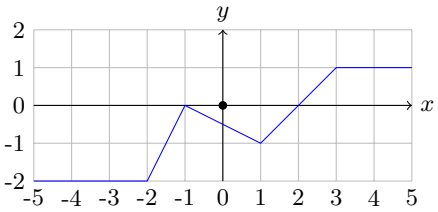
```
if   x < -4 : y = -1
elif x < -2 : y = x + 3
elif x <  2 : y = -x/2
elif x <  4 : y = x - 3
else        : y = 1
```

14.



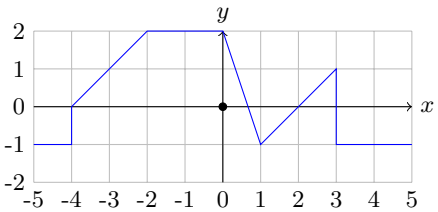

```
if   x < -2 : y = 2
elif x < -1 : y = -2*x - 2
elif x <  1 : y = x/2 + 1/2
elif x <  3 : y = -x + 2
else        : y = -1
```

15.



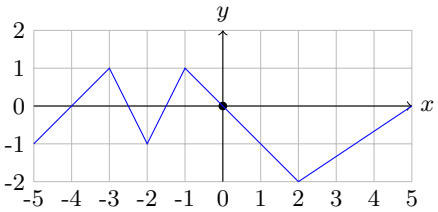

```
if   x < -2 : y = -2
elif x < -1 : y = 2*x + 2
elif x <  1 : y = -x/2 - 1/2
elif x <  3 : y = x - 2
else        : y = 1
```

16.



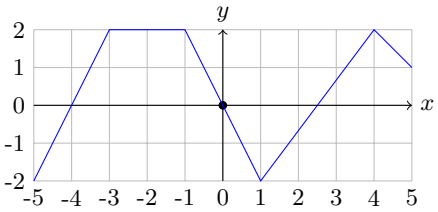

```
if   x < -4 : y = -1
elif x < -2 : y = x + 4
elif x <  0 : y = 2
elif x <  1 : y = -3*x + 2
elif x <  3 : y = x - 2
else        : y = -1
```

17.



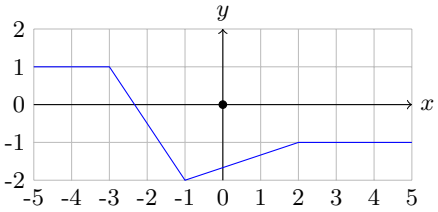

```
if   x < -5 : y = -1
elif x < -3 : y = x + 4
elif x < -2 : y = -2*x - 5
elif x < -1 : y = 2*x + 3
elif x <  2 : y = -x
elif x <  5 : y = 2*x/3 - 10/3
else        : y = 0
```

18.



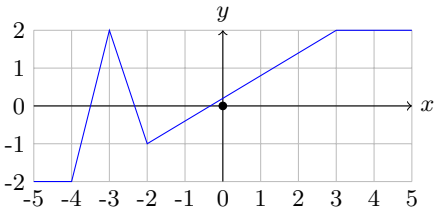

```
if   x < -5 : y = -2
elif x < -3 : y = 2*x + 8
elif x < -1 : y = 2
elif x <  1 : y = -2*x
elif x <  4 : y = 4*x/3 - 10/3
elif x <  5 : y = -x + 6
else        : y = 1
```

19.



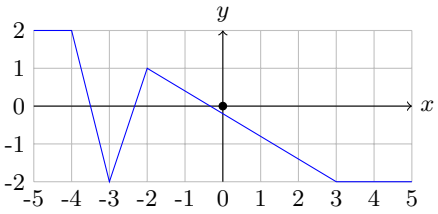

```
if   x < -3 : y = 1
elif x < -1 : y = -3*x/2 - 7/2
elif x <  2 : y = x/3 - 5/3
else        : y = -1
```

20.



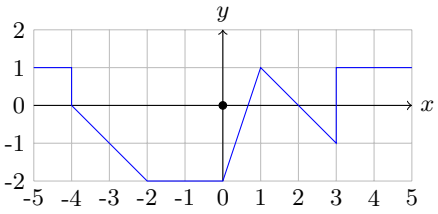

```
if   x < -4 : y = -2
elif x < -3 : y = 4*x + 14
elif x < -2 : y = -3*x - 7
elif x <  3 : y = 3*x/5 + 1/5
else        : y = 2
```

21.



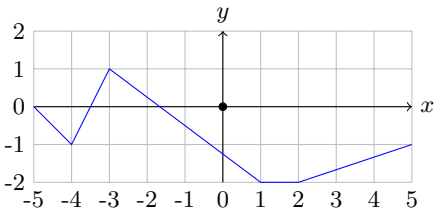

```
if   x < -4 : y = 2
elif x < -3 : y = -4*x - 14
elif x < -2 : y = 3*x + 7
elif x <  3 : y = -3*x/5 - 1/5
else        : y = -2
```

22.



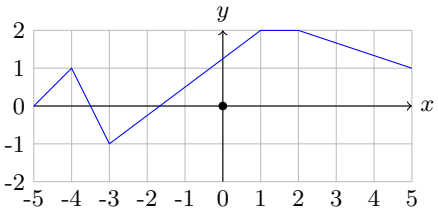

```
if   x < -4 : y = 1
elif x < -2 : y = -x - 4
elif x <  0 : y = -2
elif x <  1 : y = 3*x - 2
elif x <  3 : y = -x + 2
else        : y = 1
```

23.




```
if   x < -5 : y = 0
elif x < -4 : y = x + 5
elif x < -3 : y = -2*x - 7
elif x <  1 : y = -3*x/4 - 5/4
elif x <  2 : y = -2
elif x <  5 : y = x/3 - 8/3
else        : y = -1
```

24.




```
if   x < -5 : y = 0
elif x < -4 : y = -x - 5
elif x < -3 : y = 2*x + 7
elif x <  1 : y = 3*x/4 + 5/4
elif x <  2 : y = 2
elif x <  5 : y = -x/3 + 8/3
else        : y = 1
```