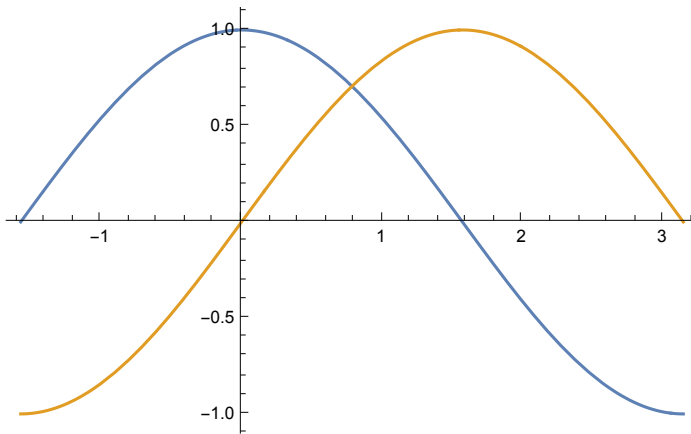


(* Quiz 33 | A Period *)

```
Plot[{Cos[x], Sin[x]}, {x, -Pi/2, Pi}]
```



```
Integrate[Cos[x] - Sin[x], {x, 0, Pi/4}] + Integrate[Sin[x] - Cos[x], {x, Pi/4, Pi/2}]
```

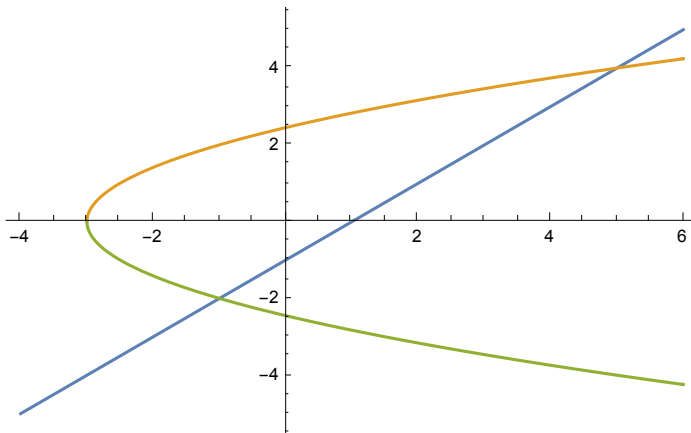
$-2 + 2\sqrt{2}$

(* Quiz 33 | F Period *)

```
Integrate[y + 1 - ((y^2 - 6) / 2), {y, -2, 4}]
```

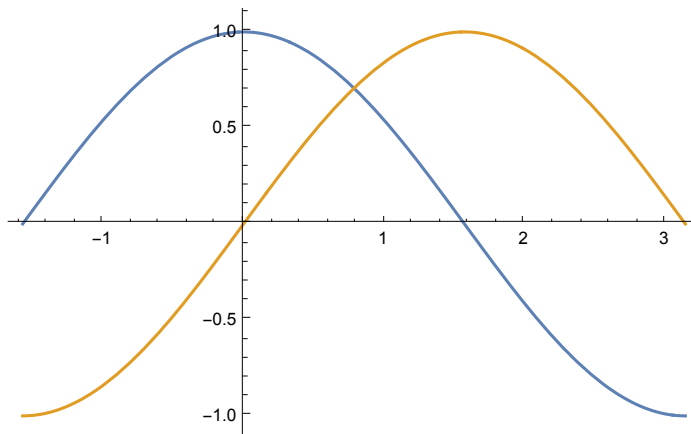
18

```
Plot[{x - 1, Sqrt[2 x + 6], -Sqrt[2 x + 6]}, {x, -4, 6}]
```



(* Quiz 33 | A Period *)

```
Plot[{Cos[x], Sin[x]}, {x, -Pi/2, Pi}]
```



Note that you can also use symmetry instead of the computation below.

```
Integrate[Cos[x] - Sin[x], {x, 0, Pi/4}] + Integrate[Sin[x] - Cos[x], {x, Pi/4, Pi/2}]
```

$-2 + 2\sqrt{2}$