In [9]:

```
from sympy import Symbol,pprint,init_printing
def func(n):
    init_printing(order='rev-lex')
    x=Symbol('x')
    series=x
    for i in range(2,n+1):
        series=series+(((-1)**i)*(x**2*i+1))/(2*i+1)
    pprint(series)
    new_series=series.subs({x:2,n:10})
    print(new_series)
    print(float(new_series))

if __name__=='__main__':
    print('Program to find series for 10 terms')
    n=10
    func(int(n))
```

```
Program to find series for 10 terms
                       2
2057483        6246026·x
──────── + x + ──────────
14549535        14549535
56140657/14549535
3.8585877143152687
```

In [ ]: