



Python verification:

```
from decimal import Decimal, getcontext

getcontext().prec = 60

# Define Euler's number e as a high-precision Decimal
e = Decimal(1).exp()

# Define helper functions to maintain high precision
def ln(x):
    return x.ln()

def sqrt(x):
    return x.sqrt()

def root_e(x):
    # The e-th root of x, meaning  $x^{1/e}$ 
    # In the decimal library, it is safer and more accurate to calculate this as  $\exp(\ln(x)/e)$ 
    return (ln(x) / e).exp()

# Preparing precise symbolic components of the formula ---
s_e = e
s_sqrt_e = sqrt(e)
s_e_e = e ** e
s_root_e_e = root_e(e)
s_ln_root_e_e = ln(s_root_e_e)
s_root_e_sqrt_e = root_e(s_sqrt_e)
s_ln_root_e_sqrt_e = ln(s_root_e_sqrt_e)
s_root_e_root_e_e = root_e(s_root_e_e)
s_ln_root_e_root_e_e = ln(s_root_e_root_e_e)
```

```

# Inside the first large block
step_1 = (((s_sqrt_e ** s_ln_root_e_root_e_e) + s_root_e_e) + s_ln_root_e_e) + s_ln_root_e_root_e_e
step_2 = step_1 ** s_root_e_e
step_3 = step_2 + s_ln_root_e_sqrt_e
step_4 = step_3 ** s_ln_root_e_sqrt_e
step_5 = step_4 - s_ln_root_e_root_e_e
step_6 = step_5 ** s_root_e_e

# First fraction and adding e^e
step_7 = (step_6 * s_ln_root_e_sqrt_e * s_sqrt_e) / s_root_e_e
step_8 = step_7 - s_ln_root_e_sqrt_e + s_e_e
step_9 = step_8 ** s_root_e_sqrt_e

# Multiplying by 5 and exponentiation
step_10 = (step_9 * s_root_e_e) + s_ln_root_e_root_e_e
step_11 = step_10 * 5
step_12 = step_11 ** s_ln_root_e_sqrt_e

# Second large fraction and exponentiation by ln(root_e(e))
step_13 = (step_12 / s_e) - s_ln_root_e_sqrt_e
step_14 = step_13 ** s_ln_root_e_e

# Final addition of e^e and multiplying the tail of the formula
step_15 = step_14 + s_e_e
final_result = step_15 * s_root_e_e * s_ln_root_e_root_e_e

# Displaying the result rounded exactly to 30 decimal places
print(f"Expression result with 30 decimal places precision:")
print(f"{final_result:.30f}")

3.141592654422839442429480287976

```

