

```
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8:
9: #include <cmath>
10: #include <SFML/Graphics.hpp>
11: #include <SFML/Window.hpp>
12:
13: class Sierpinski : public sf::Drawable
14: {
15:     public:
16:
17:         Sierpinski(int N, int size_tri);
18:
19:         void sierpinski(sf::ConvexShape mid_triangle, int recursion,
sf::RenderTarget& target) const;
20:
21:         sf::ConvexShape filledtriangle(sf::Vector2f left_tri, sf::Ve
ctor2f bottom_tri, sf::Vector2f right_tri, sf::RenderTarget& target) const;
22:         //destructor;
23:         ~Sierpinski();
24:
25:     private:
26:         sf::ConvexShape triangle;
27:
28:         int depth_;
29:         int side_;
30:
31:
32:         void virtual draw(sf::RenderTarget& target, sf::RenderStates
states) const;
33:
34:
35: };
```