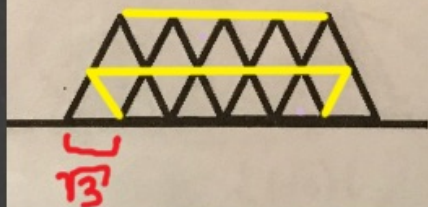


Five equilateral triangles, each with sides of length $2\sqrt{3}$, are arranged such that one side of each triangle lies along a line. Along this line, the midpoint of the base of one triangle is a vertex of the next triangle. Determine the area of the region of the plane covered by the union of the five triangular regions.



Tons of ways to do this....!

Area of equilateral Δ is $A(s) = \frac{\sqrt{3}}{4} s^2$

$$A(\sqrt{3}) = \frac{\sqrt{3}}{4} (\sqrt{3})^2 = \frac{3\sqrt{3}}{4} \text{ units}^2 \text{ for one "little" } \Delta$$

$$\frac{3\sqrt{3}}{4} \text{ units}^2 \times 20 \Delta's = 15\sqrt{3} \text{ units}^2$$

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