Connection: Distance/Area/Volume

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Distance (length): number of segments* needed to connect two points.

Perimeter: distance around a region

Area: number of squares* needed to cover a region or surface.

Surface Area: sum of face areas for a solid

Volume: number of cubes* needed to fill a space.

*of uniform size

Arc Length and Sector Area Connected

For a circle with radius 12, do the circle blanks.

For a sector of that circle made by a central angle of 200°,

Arc Length

(length of crust of apple pie slice)

Sector Area (Number of covering Hershey squares)

$$\frac{200^{\circ}}{360^{\circ}} \times \text{full perimeter}$$
 $\frac{200^{\circ}}{360^{\circ}} \times \text{full area}$

equals what?

equals what?