## Area and Perimeter

Where does pie ( $\pi=3.14$ ) come from?
Area formulas:
Parallelograms: $\mathrm{A}=\mathrm{bh}$
Triangle: $\mathrm{A}=1 / 2 \mathrm{bh} \quad$ Where does the formula for a triangle come from?
Trapezoid: $A=1 / 2 h\left(b_{1}+b_{2}\right)$
Circle: $\mathrm{A}=\pi \mathrm{r}^{2}$
The perimeter of a circle is called the $\qquad$ .

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\mathrm{C}=\pi \mathrm{d}
$$

1. A square banner for a school play shows a logo within a circle inscribed in the banner. The radius of the circle is 5 feet. Find the circumference of the circle and the perimeter of the banner.

2. Kevin wants to tile the floor shown in the accompanying diagram. If each tile measures 1 ft by 1 ft and costs $\$ 2.99$, what will be the total cost, including an $8 \%$ sales tax, for tiling the floor? $\quad 3 \mathrm{ft}$

3. The plan of a parcel of land is represented by trapezoid ABCD in the accompanying diagram. If the area of triangle ABE is 600 square feet, find the minimum number of feet of fence needed to completely enclose the entire parcel of land, ABCD.

4. Virginia has a circular rug on her square living room floor, as represented in the accompanying diagram. If her entire living room floor measures 100 square feet, what is the area of the part of the floor covered by the rug?

5. To the nearest tenth of a square foot, find the area of the patio below.

6.The figure below is made up of 2 squares and 1 circle. Find its perimeter.

