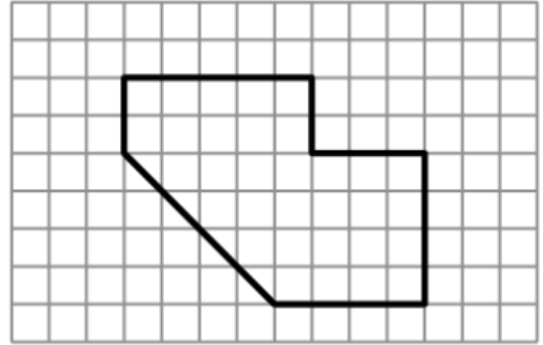


Homework 8.3.1

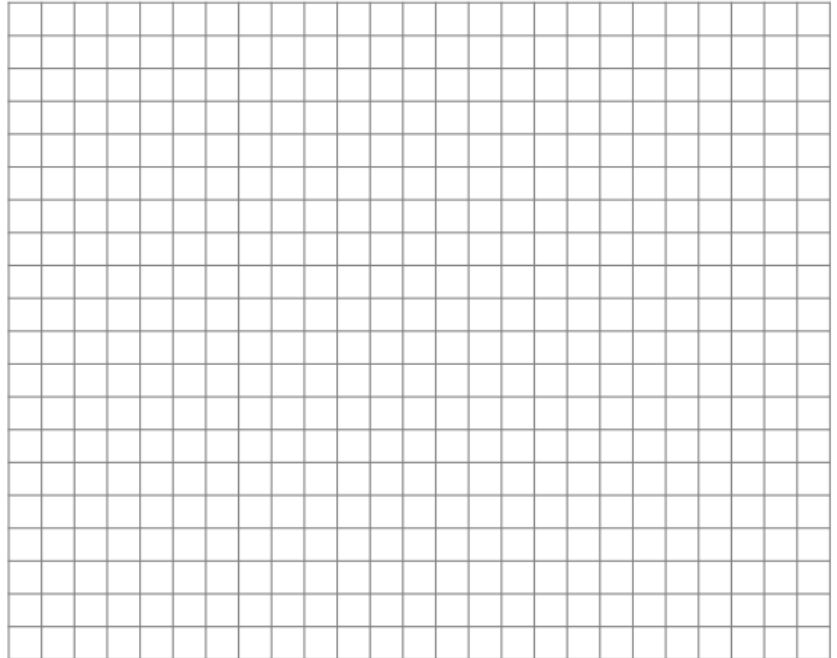
1) Examine the shape at right.

a. What are the area and perimeter of the shape?



b) On graph paper below, enlarge the figure so that the linear scale factor is 3.

What are the area and perimeter of the new shape?



What is the ratio of the perimeters of the shapes?

What is the ratios of the areas of the shapes?

2) The exterior angle of a regular polygon is 20° .

a) What is the measure of an interior angle of this polygon? Show how you know.

b) How many sides does this polygon have? Show all work.

3) A regular hexagon with side length 4 has the same area as a square. What is the length of the side of the square?

4) Simplify each of the following expressions. Be sure that your answer has no negative or fractional exponents.

a. $8^{2/5}$	b. $(3x^5y^7)^{-3}$	c. $(-10x^3 \cdot y^{-7})(2x^{-8}y^{15})$
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5) Solve each of the following Quadratics by Factoring and using the Zero Product Property

a) $n^2 + 3n - 12 = 6$	b) $n^2 + 8n = -15$	c) $6b^2 - 13b + 3 = -3$
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