Geometry
Unit: Quadrilaterals and Polygons
Section: Polygons

Review Worksheet Key

1) What is the name of a polygon with 5 sides all equals to 11 feet?

Regular pentagon

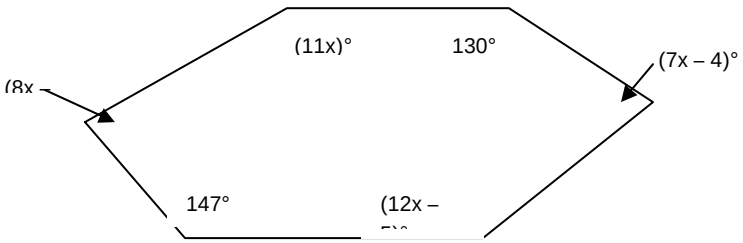
2) What is the name of a polygon with side lengths 3 in, 5 in, 2 in, 7 in, 12 in, 5 in and 8 in?

Irregular heptagon

3) What is the sum of the measure of the interior angle of a convex nonagon?

$180(9 - 2) = 1260°$

4) Find the value of x in the figure below.



$180(6 - 2) = 720$
$(8x - 4) + (11x) + (130) + (7x - 4) + (12x - 5) + (147) = 720$
$38x + 264 = 720$
$38x = 456$
$x = 12$

5) The exterior angles of an octagon measure $(3x + 1)°$, $120°$, $(2x + 5)°$, $100°$, $(5x - 3)°$, $(5x + 4)°$, $(2x - 7)°$, and $122°$. Find the value of x.

$(3x + 1) + (120) + (2x + 5) + 100 + (5x - 3) + (5x + 4) + (2x - 7) + 122 = 360$
$17x + 342 = 360$
$17x = 18$
$x = \frac{18}{17}$