PRACTICE FOR TAKS OBJECTIVES 6 AND 8
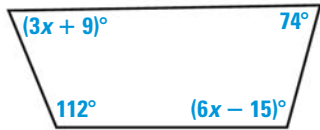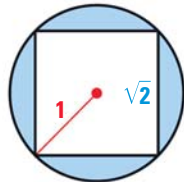
1. Which equation can be used to determine the value of x in the diagram?

A $3x + 9 + 112 + 6x - 15 + 74 = 360$

B $3x + 9 + 112 + 6x - 15 + 74 = 720$

C $3x + 9 = 6x - 15$

D $112 + 6x - 15 = 3x + 9 + 74$

2. A square with a side length of $\sqrt{2}$ units is inscribed in a circle with a radius of 1 unit. What is the approximate area of the shaded region?
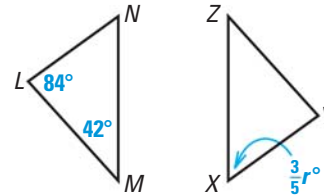

F 1.14 square units

G 1.73 square units

H 4.28 square units

J 5.14 square units

3. The floor plan shown below for a gazebo is a regular dodecagon, a polygon with 12 sides. What is the measure of each interior angle?
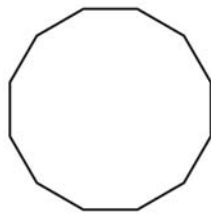
A 140°

B 150°

C 180°

D 2160°

4. Given that $\angle Z \cong \angle M$ and $\angle Y \cong \angle L$, what is the value of r?

F 18

G $\dfrac{162}{5}$

H 58

J 90

5. Which transformation is used to create the pattern shown?

A Translation

B Reflection

C Rotation

D Dilation

MIXED TAKS PRACTICE

6. A community is having a Taste of the Town event featuring dishes from the area's best restaurants. The cost of admission is $25 in advance and $35 at the door. There are x people who pay in advance. A total of 530 tickets are sold. Which equation can be used to find the total amount, s, of money from ticket sales?
TAKS Obj. 4

F $s = 25x - 35(530 + x)$

G $s = 25(530 - x) + 35x$

H $s = 25x + 35(530 - x)$

J $s = 25x + 35(530)$