Name:

BECA / Dr. Huson / Geometry 02 Area and volume

2.3 CW Compound areas

1. Do Now: The ray $\overrightarrow{KM}$ bisects $\angle JKL$. Given $m\angle JKM = 4x - 20$ and $m\angle MKL = 3x + 4$. Identify the true statement(s).

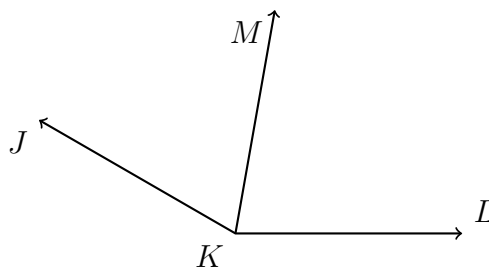   (a) $\angle JKM$ and $\angle MKL$ are a linear pair
       $(4x - 20) + (3x + 4) = 180°$

   (b) $\angle JKM$, $\angle MKL$ are adjacent and
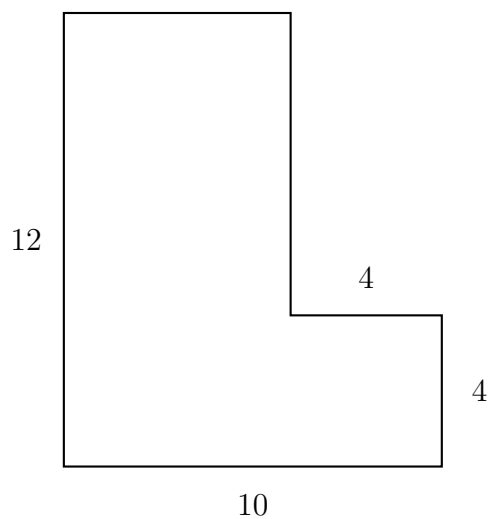 $4x - 20 = 90°$

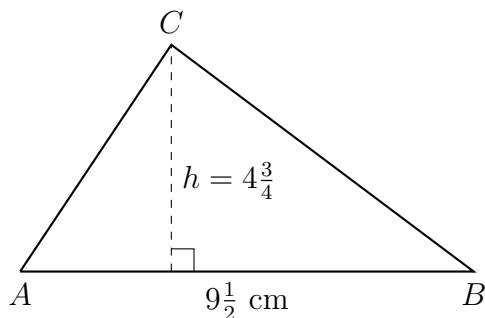   (c) $\angle JKM \cong \angle MKL$
       $4x - 20 = 3x + 4$

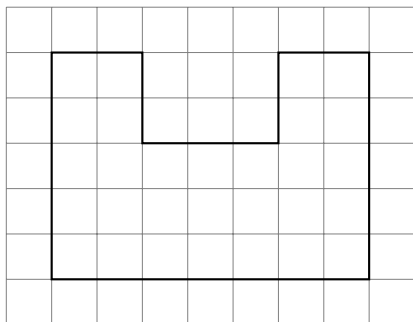   Copy the correct equation and find $m\angle JKL$. Check your answer.

2. Find the area of the shape shown below. All angles are 90°.   *(not drawn to scale)*

3. Find the area of $\triangle ABC$. The altitude h of the triangle is $4\frac{3}{4}$ centimeters and the base $AB = 9\frac{1}{2}$ cm. (diagram not to scale)

C

$h = 4\frac{3}{4}$

A $9\frac{1}{2}$ cm B

4. Find the area A of the shape shown below in terms of unit squares.

5. Find the area of shape $ABCDE$ below, a triangle on a rectangle. The altitude h of the triangle is 3.20 centimeters and the base $AB = 5.5$ cm. The rectangle is 1 cm tall. (diagram not to scale)

D

$h = 3.20$ cm

E C

1 cm

A B

5.5 cm