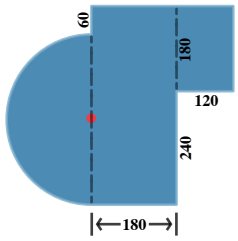
Geometry Problems

Area and Perimeter of Complex 2D Shapes
Rectangles and Semi-circles
Math Worksheet 39

Name: _____

Answer the following. Show your solutions.

Find the perimeter of this figure in yards.

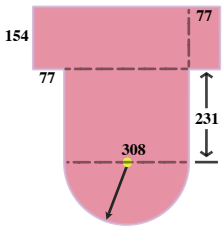


$C_{\frown} = \pi r + 2r - d$
$= [3.14(180)+2(180)]-360$
$= 565.2$

P_T = SUM OF ALL SIDES
$= 565.2+60+300+180$
$+120+240+180$
$= 1645.2$

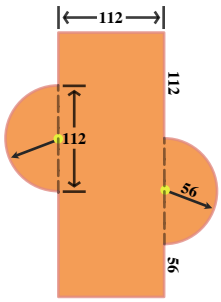
1645.2 yd
Perimeter

Find the area of the figure below. Corners that look square are square. Dimensions are in meters.



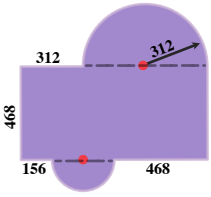
Area

Express the perimeter of this figure in feet.



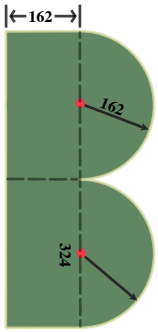
Perimeter

Solve for the area of the figure below. Corners that look square are square. Dimensions are in inches.



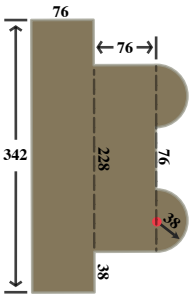
Area

Solve for the area of the figure below. Dimensions are in centimeters. Corners that look square are square.



Area

Find the perimeter of this figure Dimensions are in millimeters.



Perimeter

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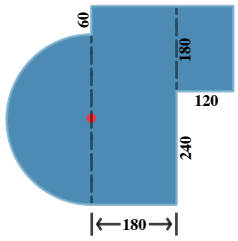
Name: ANSWER KEY

Answer the following. Show your solutions.

Find the perimeter of this figure in yards.

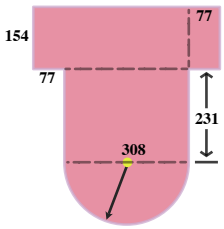


$C_{\frown} = \pi r + 2r - d$
$= [3.14(180)+2(180)]-360$
$= 565.2$

P_T = SUM OF ALL SIDES
$= 565.2+60+300+180$
$+120+240+180$
$= 1645.2$

1645.2 yd
Perimeter

Find the area of the figure below. Corners that look square are square. Dimensions are in meters.



$A_1 = l \times w$
$= 462 \times 154$
$= 71148$

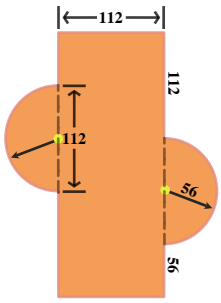
$A_2 = l \times w$
$= 308 \times 231$
$= 71148$

$A_3 = \frac{1}{2} \pi r^2$
$= \frac{1}{2} (3.14)(154)^2$
$= 37234.12$

$A_T = A_1+A_2+A_3$
$= 71148+37234.12$
$+71148$
$= 179530.12$

179530.12 m²
Area

Express the perimeter of this figure in feet.

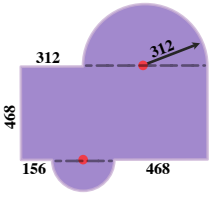


$C_{\frown\frown} = [\pi r + 2r - d]\ 2$
$= \{[3.14(56)+2(56)]-112\}2$
$= 175.84$

P_T = SUM OF ALL SIDES
$= 175.84+56+112+56+112+112+112$
$= 735.84$

735.84 ft
Perimeter

Solve for the area of the figure below. Corners that look square are square. Dimensions are in inches.



$A_1 = \frac{1}{2} \pi r^2$
$= \frac{1}{2} (3.14)(312)^2$
$= 152830.08$

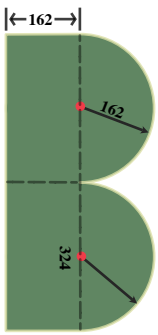
$A_2 = l \times w$
$= 936 \times 468$
$= 438048$

$A_3 = \frac{1}{2} \pi r^2$
$= \frac{1}{2} (3.14)(156)^2$
$= 38207.52$

$A_T = A_1+A_2+A_3$
$= 152830.08+438048$
$+38207.52$
$= 629085.6$

629085.6 in²
Area

Solve for the area of the figure below. Dimensions are in centimeters. Corners that look square are square.



$A_1 = \frac{1}{2} \pi r^2$
$= \frac{1}{2} (3.14)(162)^2$
$= 41203.08$

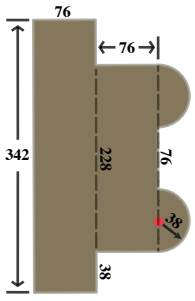
$A_2 = \frac{1}{2} \pi r^2$
$= \frac{1}{2} (3.14)(162)^2$
$= 41203.08$

$A_3 = l \times w$
$= 648 \times 162$
$= 104976$

$A_T = A_1+A_2+A_3$
$= 41203.08+41203.08$
$+104976$
$= 187382.16$

187382.16 cm²
Area

Find the perimeter of this figure Dimensions are in millimeters.



$C_{\frown} = [\pi r + 2r - d]\ 2$
$= \{[3.14(38)+2(38)]-76\}2$
$= 238.64$

P_T = SUM OF ALL SIDES
$= 238.64+76+76+76$
$+38+76+76+76+342$
$= 1074.64$

1074.64 mm
Perimeter