M7H

March 27, 2012

Get out YELLOW WS1 - 3D figures...

3/27 - Area and Perimeter/Circumference

Find the area of each and perimeter of each, if possible.

Show all of your work using formulas, substititon, solving and labeling.

Square

$A = s^2$

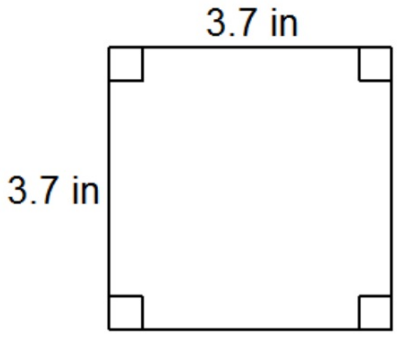
$P = 4s$

$A = s^2$

$A = 3.7^2$

3.7 × 3.7 = 13.69

$A = 13.69 \text{ in}^2$



$P = 4s$

$P = 4(3.7)$

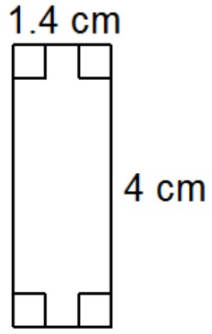
$P = 14.8 \text{ in}$

4 × 3.7 = 14.8

Rectangle

$A = LW$

$P = 2L + 2W$



$A = LW$

$= 4(1.4)$

$= 5.6 \text{ cm}^2$

Label for AREA is units squared

$P = 2L + 2W$

$= 2(4) + 2(1.4)$

$= 8 + 2.8$

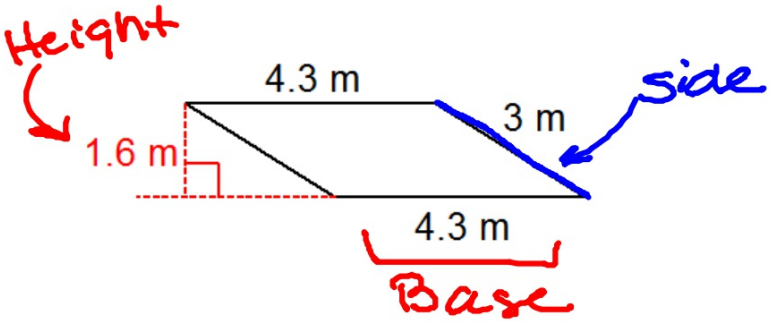
$= 10.8 \text{ cm}$

Label for perimeter is just units

Parallelogram

$A = BH$

$P = 2B + 2S$



$A = BH$

$= (4.3)(1.6)$

$= 6.88\ m^2$

$4.3 \times 1.6 = 6.88$

$P = 2B + 2S$

$= 2(4.3) + 2(3)$

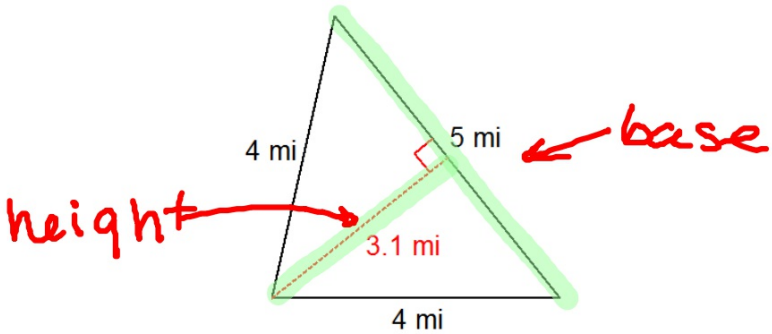
$= 8.6 + 6$

$= 14.6\ m$

Triangle

$A = \frac{1}{2}bh$

$P =$ add all sides



$A = \frac{1}{2}bh$

$= \frac{1}{2}(5)(3.1)$

$= 7.75 \text{ mi}^2$

$P = 4 + 4 + 5$

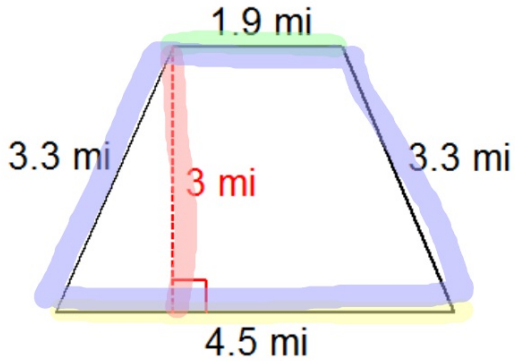
$= 13 \text{ mi}$

0.5 × 5 × 3.1 = 7.75

Trapezoid

$A = \frac{1}{2}(b_1 + b_2)h$

$P =$ add all sides



$A = \frac{1}{2}(b_1 + b_2)h$

$= \frac{1}{2}(4.5 + 1.9) \cdot 3$

$= \frac{1}{2}(6.4)\,3$

$= 9.6 \text{ mi}^2$

$P = 4.5 + 3.3 + 1.9 + 3.3$

$= 13 \text{ mi}$

4.5 + 3.3 + 1.9 + 3.3 = 13

0.5 × 6.4 × 3 = 9.6

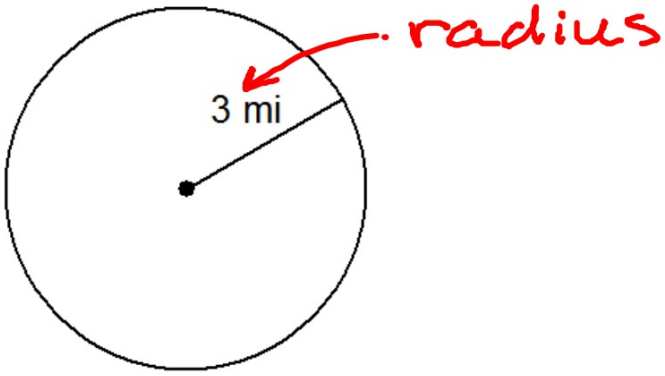
Find the area and circumference of each. Round to the nearest tenth.

Circle

$A = \pi r^2$

$C = 2\pi r$

$\pi = 3.14$



$A = \pi r^2$

$= (3.14)3^2$

$= (3.14) \cdot 9$

$= 28.26 \text{ mi}^2$

$C = 2\pi r$

$= 2(3.14)3$

$= 18.84 \text{ mi}$

3.14 × 6 = 18.84

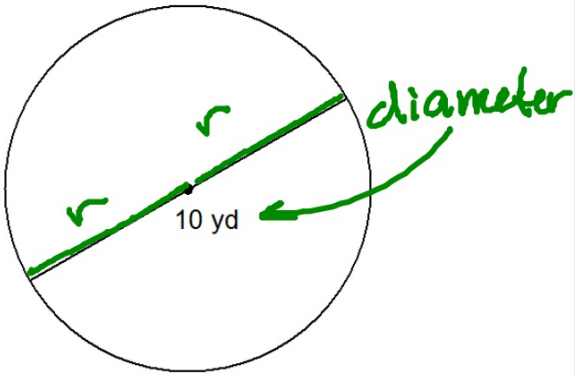
3.14 × 9 = 28.26

Circle

$A = \pi r^2$

$C = 2\pi r$

$C = \pi d$



$A = \pi r^2$

$= (3.14)5^2$

$= (3.14)25$

$= 78.5 \text{ yd}^2$

$C = \pi d$

$= (3.14)\,10$

$= 31.4 \text{ yd}$

3.14 × 25 = 78.5

Homework

Pink Geometry WS2

Due