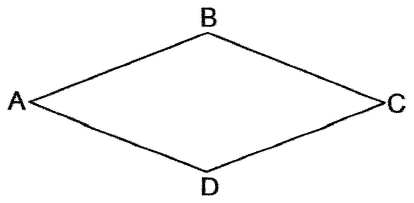
Bellwork Geo Thursday, April 16, 2020

Find the area of each figure to the nearest hundredth.

1. In Rhombus ABCD $BD = 24$ and $DC = 37$



2. A regular Decagon (10-sides) with sides that are each 8 units long.

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Answers

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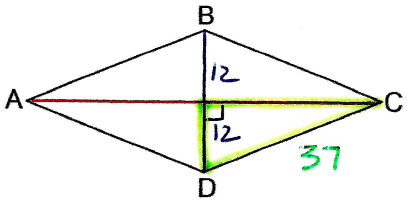
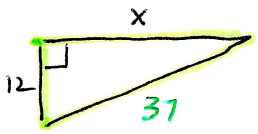




$x^2 + 12^2 = 37^2$

$x^2 = 37^2 - 12^2$

$x = \sqrt{37^2 - 12^2}$

$x = 35$

DIAG $BD = 24$

DIAG $AC = 2(35) = 70$

$A = \frac{1}{2} d_1 \cdot d_2 = \frac{1}{2}(24)(70)$

$A = 840$

2. A regular Decagon (10-sides) with sides that are each 8 units long.

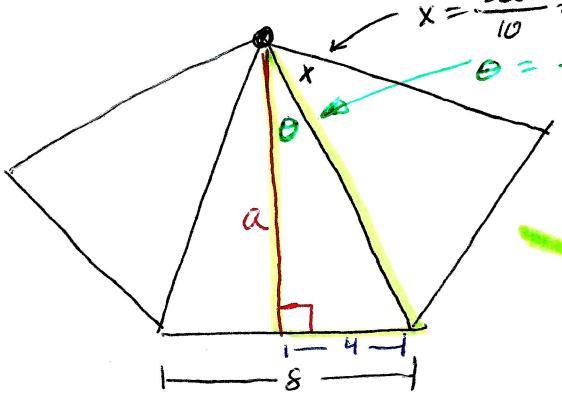
$A = \frac{1}{2} a \cdot P$

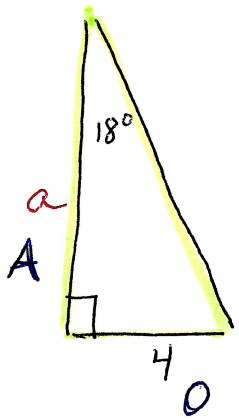
perimeter $= 10(8) = 80$

$P = 80$

$A = \frac{1}{2}(12.31)(80)$

$A = 492.4$





SOHCAHTOA

$\tan 18° = \frac{4}{a}$

$a = 12.31$