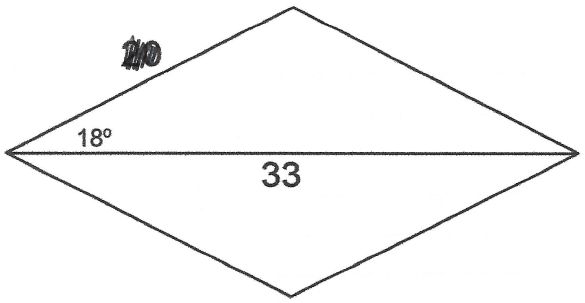
Bellwork Geo Friday, March 27, 2020

1. These three numbers are sides of a triangle. Is this a right △, an acute △, or an obtuse △?

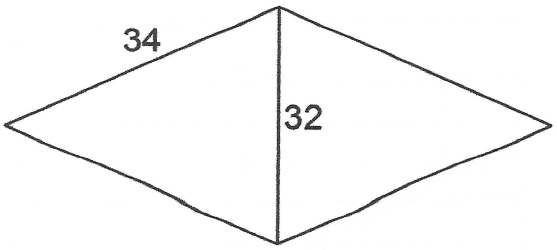
18, 23, 29

2. Find the area of each Rhombus. Round to the nearest hundredth.

a)



b)



Bellwork Geo Friday, March 27, 2020 ANSWERS

1. These three numbers are sides of a triangle. Is this a right △, an acute △, or an obtuse △?

18, 23, 29
a & b → c

$c^2 = 29^2 = 841$

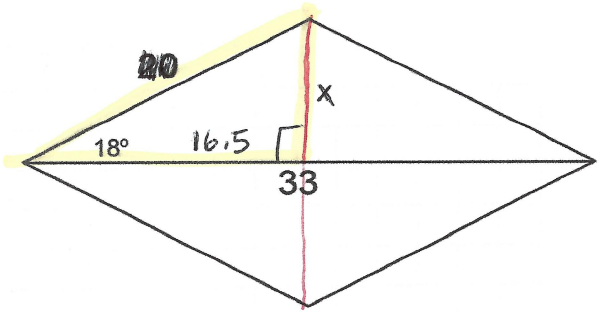
$a^2+b^2 = 18^2+23^2 = 853$

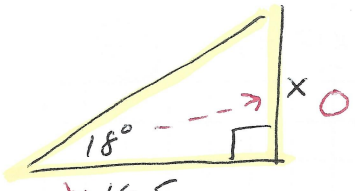
$c^2 < a^2+b^2$

Therefore, the △ is ACUTE

2. Find the area of each Rhombus. Round to the nearest hundredth.

a)





SOHCAHTOA

$\tan 18° = \frac{x}{16.5}$

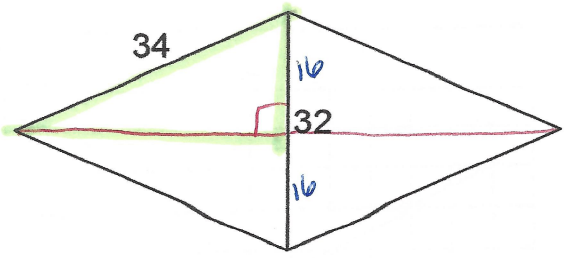
$x = 5.36$

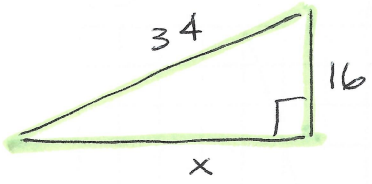
HORIZ DIAG = 33

VERT DIAG = $2x = 2(5.36) = 10.72$

$A = \frac{1}{2}(33)(10.72) = 176.88$

b)





$x^2+16^2 = 34^2$

$x^2 = 34^2-16^2$

$x = \sqrt{34^2-16^2}$

$x = 30$

VERTICAL DIAG = 32

HORIZONTAL DIAG = $2x = 2(30) = 60$

$A = \frac{1}{2}(32)(60)$

$A = 960$