Find the area of this Kite to the nearest hundredth.
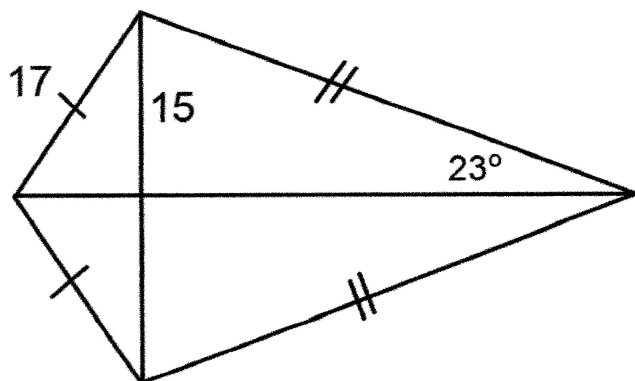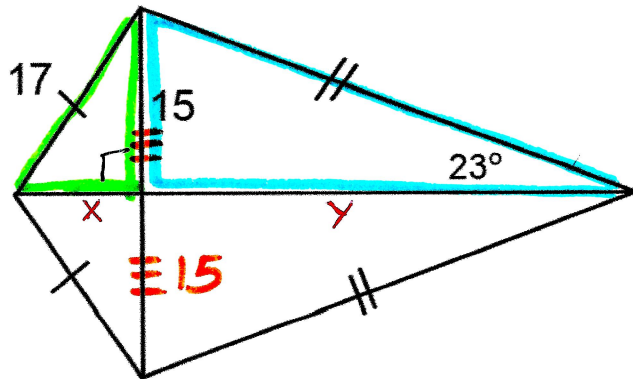

Area =

Find the area of this Kite to the nearest hundredth.

17

15

≡
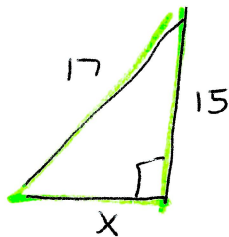
23°

X   Y

≡15

Area =

$$A = \frac{1}{2} d_1 \cdot d_2$$

$$= \frac{1}{2} (30)(43.34)$$

$$A = 650.10$$

VERTICAL DIAGONAL
$$= 2(15) = 30$$

Horizontal Diagonal = x + y
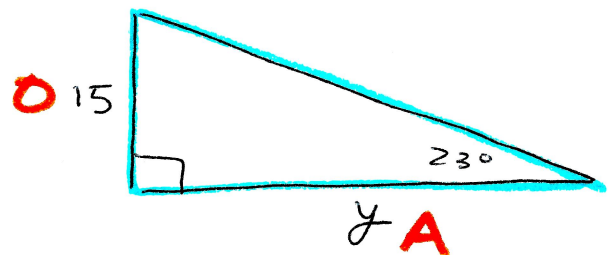$$= 8 + 35.34 = 43.34$$

FOR X

For y

17

15

X

use pythagorean thm:

$$17^2 = x^2 + 15^2$$

$$\sqrt{x^2} = \sqrt{17^2 - 15^2}$$

$$x = 8$$

○ 15

23°

y   A

use   SOHCAH**TOA**

$$\text{Tan } 23° = \frac{15}{y}$$

$$y = 35.34$$

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