

Area of an Scalene Triangle | Decimals

Example:

$$\text{Area of scalene triangle} = \sqrt{s(s-a)(s-b)(s-c)}$$

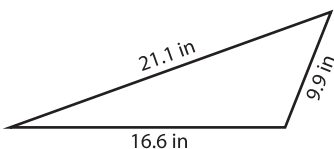
s = half of the perimeter

$$s = \frac{a + b + c}{2}$$

$$s = \frac{21.1 \text{ in} + 9.9 \text{ in} + 16.6 \text{ in}}{2}$$

$$s = \frac{47.6 \text{ in}}{2}$$

$$s = \mathbf{23.8 \text{ in}}$$



Area = ?

$$\text{Area of scalene triangle} = \sqrt{s(s-a)(s-b)(s-c)}$$

$$= \sqrt{23.8(23.8 - 21.1)(23.8 - 9.9)(23.8 - 16.6)}$$

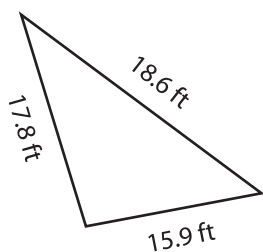
$$= \sqrt{23.8(2.7)(13.9)(7.2)}$$

$$= \sqrt{6,431.1408}$$

$$= \mathbf{80.19 \text{ in}^2}$$

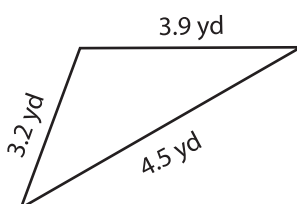
Find the area of each scalene triangle. Round your answer to two decimal places.

1)



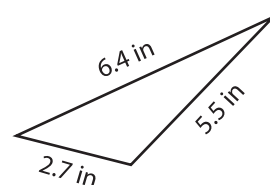
Area = _____

2)



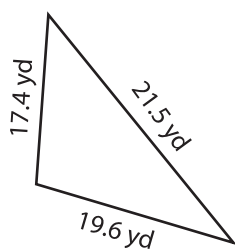
Area = _____

3)



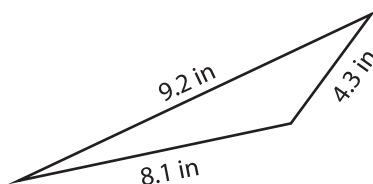
Area = _____

4)



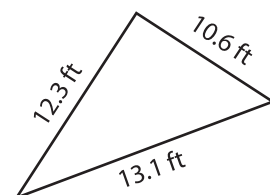
Area = _____

5)



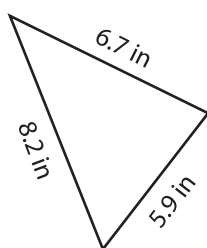
Area = _____

6)



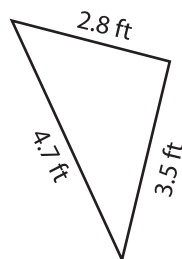
Area = _____

7)



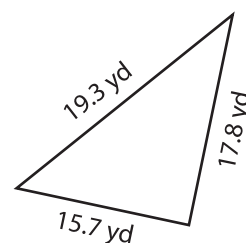
Area = _____

8)



Area = _____

9)



Area = _____