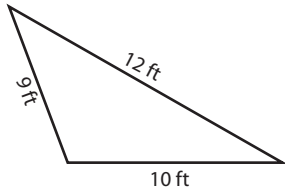


Name : \_\_\_\_\_

## Area of a Scalene Triangle

T1S1

Example:



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

$s$  = half of the perimeter

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

$$s = \frac{10 \text{ ft} + 12 \text{ ft} + 9 \text{ ft}}{2}$$

$$s = \frac{31 \text{ ft}}{2}$$

$$s = 15.5 \text{ ft}$$

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

$$= \sqrt{15.5(15.5-10)(15.5-12)(15.5-9)}$$

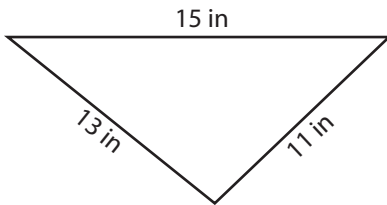
$$= \sqrt{15.5(5.5)(3.5)(6.5)}$$

$$= \sqrt{1939.4375}$$

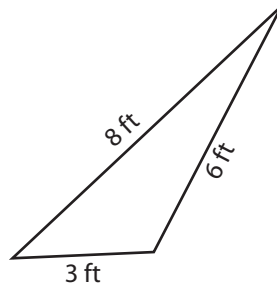
$$= 44.04 \text{ ft}^2$$

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

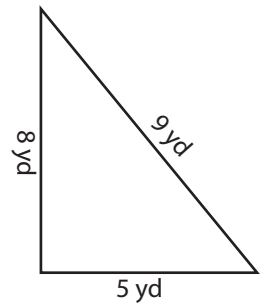
1)



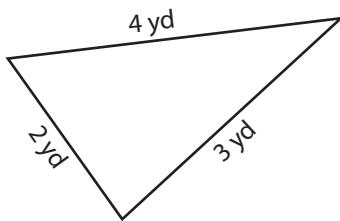
2)



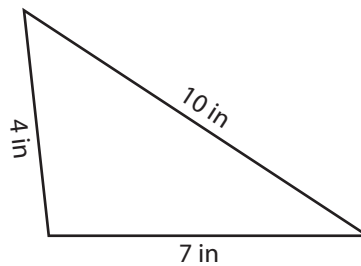
3)



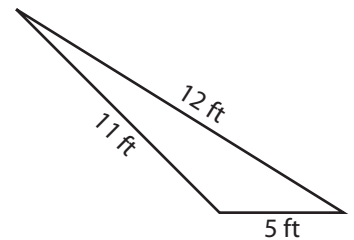
4)



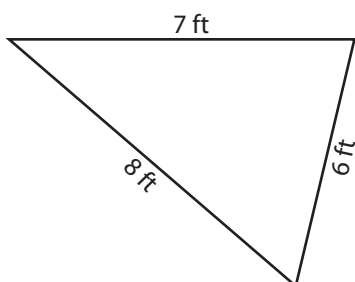
5)



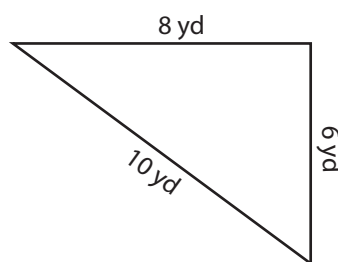
6)



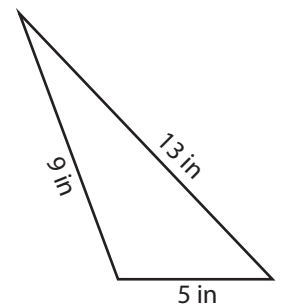
7)



8)



9)



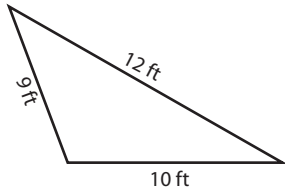
Name : \_\_\_\_\_

## Answer key

### Area of a Scalene Triangle

T1S1

Example:



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

$s$  = half of the perimeter

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

$$s = \frac{10 \text{ ft} + 12 \text{ ft} + 9 \text{ ft}}{2}$$

$$s = \frac{31 \text{ ft}}{2}$$

$$s = 15.5 \text{ ft}$$

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

$$= \sqrt{15.5(15.5-10)(15.5-12)(15.5-9)}$$

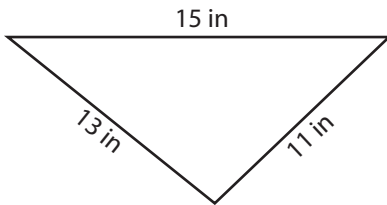
$$= \sqrt{15.5(5.5)(3.5)(6.5)}$$

$$= \sqrt{1939.4375}$$

$$= 44.04 \text{ ft}^2$$

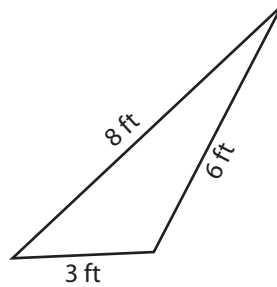
Find the area of each scalene triangle. Round your answer to two decimal places.

1)



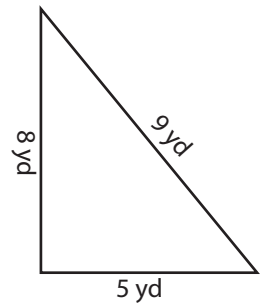
Area = 69.63 in<sup>2</sup>

2)



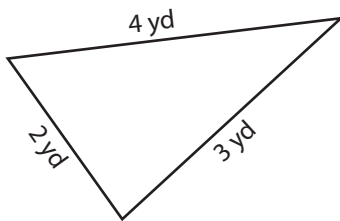
Area = 7.64 ft<sup>2</sup>

3)



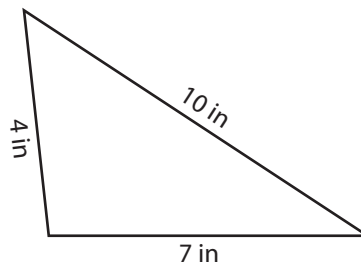
Area = 19.9 yd<sup>2</sup>

4)



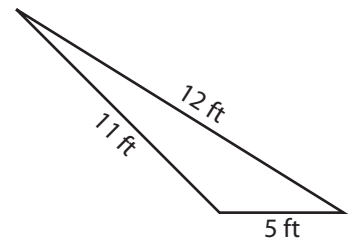
Area = 2.9 yd<sup>2</sup>

5)



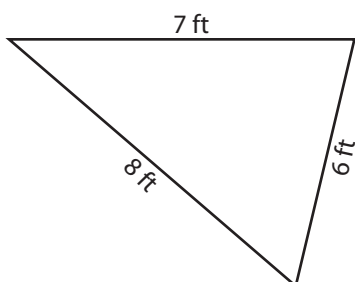
Area = 10.93 in<sup>2</sup>

6)



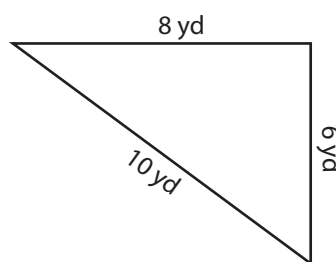
Area = 27.5 ft<sup>2</sup>

7)



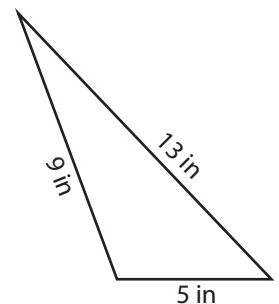
Area = 20.33 ft<sup>2</sup>

8)



Area = 24 yd<sup>2</sup>

9)



Area = 16.07 in<sup>2</sup>