

## Area ... Set 1

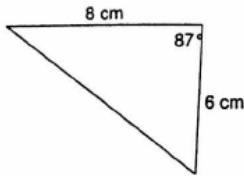
### Answers

#### Trigonometry and Area

$$A = \frac{1}{2} ab \sin(C)$$

Find the area of each figure. Round your answer to the nearest tenth.

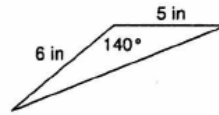
1)



$$A = \frac{1}{2} (6)(8) \sin(87)$$

$$A = 24.0 \text{ cm}^2$$

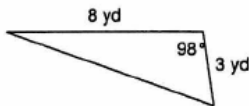
2)



$$A = \frac{1}{2} (5)(6) \sin(140)$$

$$A = 9.6 \text{ in}^2$$

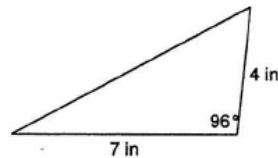
3)



$$A = \frac{1}{2} (3)(8) \sin(98)$$

$$A = 11.9 \text{ yd}^2$$

4)



$$A = \frac{1}{2} (4)(7) \sin(96)$$

$$A = 13.9 \text{ in}^2$$

5) A triangle with two sides that measure 6 yd and 2 yd with an included angle of  $10^\circ$ .

$$A = \frac{1}{2} (2)(6) \sin(10)$$

$$A = 1.0 \text{ yd}^2$$

6) A triangle with two sides that measure 6 m and 8 m with an included angle of  $137^\circ$ .

$$A = \frac{1}{2} (6)(8) \sin(137)$$

$$A = 16.4 \text{ m}^2$$

7) A triangle with two sides that measure 5 cm and 8 cm with an included angle of  $39^\circ$ .

$$A = \frac{1}{2} (5)(8) \sin(39)$$

$$A = 12.6 \text{ cm}^2$$

8) A triangle with two sides that measure 8 ft and 7 ft with an included angle of  $30^\circ$ .

$$A = \frac{1}{2} (7)(8) \sin(30)$$

$$A = 14 \text{ ft}^2$$