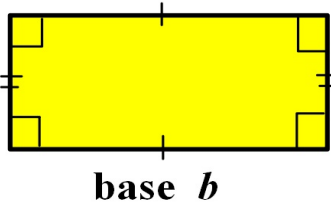


11-1 Area of Rectangles

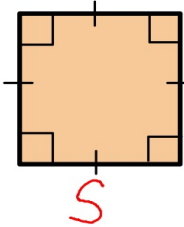
March 1

std. 10.0



height (altitude)
 h

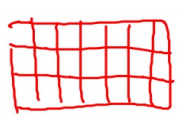
Rectangle
 $A = bh$



side s
Square
 $A = s^2$

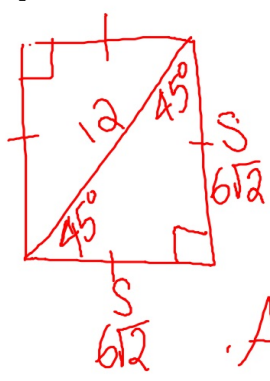
Examples: find the area

1 rectangle with base $2\sqrt{3}$ cm and height 2 cm



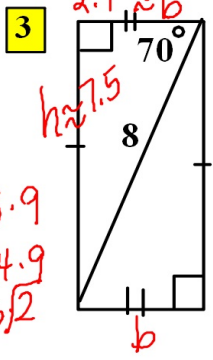
$A = bh$
 $= 2\sqrt{3} \cdot 2 = 4\sqrt{3} \text{ cm}^2$ $4\sqrt{3} \text{ sq. cm.}$

2 square with diagonal 12



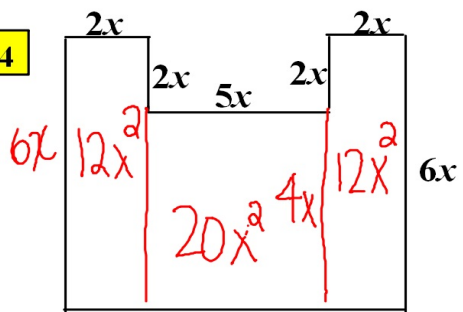
$s^2 + s^2 = 12^2$
 $2s^2 = 144$
 $\sqrt{s^2} = \sqrt{72}$ 8.9
 $s = 6\sqrt{2}$ $\sqrt{36 \cdot 2}$

$A = 6\sqrt{2} \cdot 6\sqrt{2}$
 $36 \cdot 2 = 72 \text{ units}^2$



$\cos 70^\circ = \frac{b}{8}$
 $b = 8 \cdot \cos 70^\circ$
 $b \approx 2.7$
 $\sin 70^\circ = \frac{h}{8}$
 $h = 8 \cdot \sin 70^\circ$
 $A = 20.25 \text{ u}^2$

4



$$= 44x^2$$