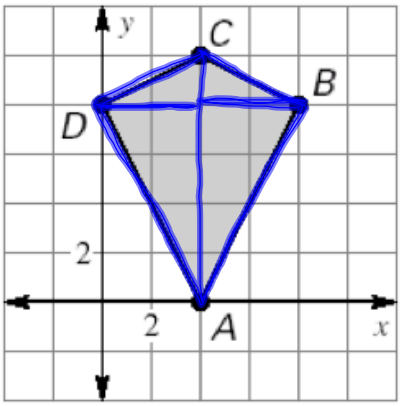
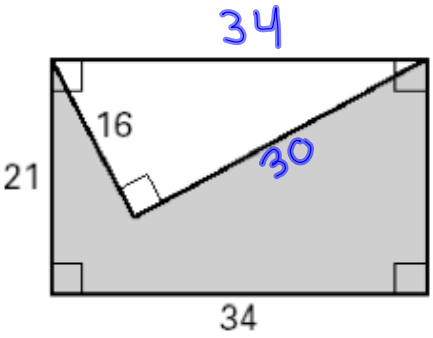
No Bellwork
04/11/12

Review 11.1



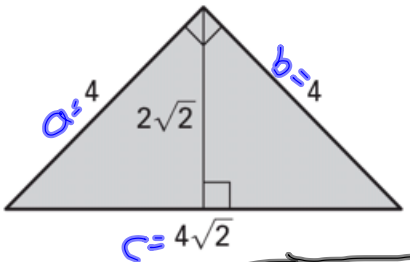
$b = 10$
$h = 4$
$A = \frac{1}{2}(10)(4) = 20$
40 un.^2



$A = 34 \cdot 21 = 714$
$A = \frac{1}{2}(16)(30)$
$A = 240$
$714 - 240 = 474 \text{ un.}^2$

Heron's Formula Another way to find the area of a triangle is to use Heron's Formula. The formula is $A = \sqrt{s(s-a)(s-b)(s-c)}$, where A is the area of the triangle, a, b, and c are side lengths, and s is one half the perimeter of the triangle. Use the triangle below to justify Heron's Formula.

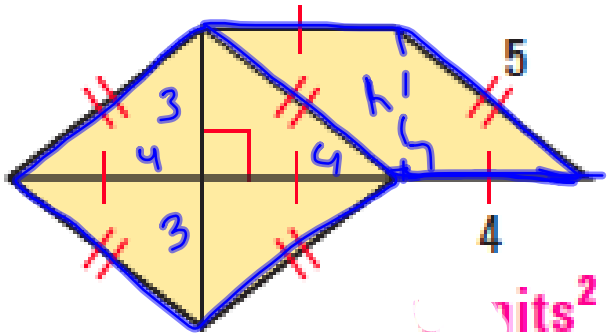
$A = \frac{1}{2}bh$
$A = \frac{1}{2}(4\sqrt{2})(2\sqrt{2})$
$A = 8 \text{ un.}^2$



$P = 4 + 4 + 4\sqrt{2}$
$P = 8 + 4\sqrt{2}$
$S = \frac{8 + 4\sqrt{2}}{2}$
$S = 4 + 2\sqrt{2}$

$A = \sqrt{(4+2\sqrt{2})(4+2\sqrt{2}-4)(4+2\sqrt{2}-4)(4+2\sqrt{2}-4\sqrt{2})}$

Review 11.2



units^2

1. $A = b \cdot h$

$5^2 = 4^2 + h^2$

$h = 3$

$A = 4 \cdot 3 = 12$

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

$d_1 = 6$

$d_2 = 8$

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

$A = 24$

3. $12 + 24 =$ 36 units^2

Homework Assignment

Worksheet 11.2B