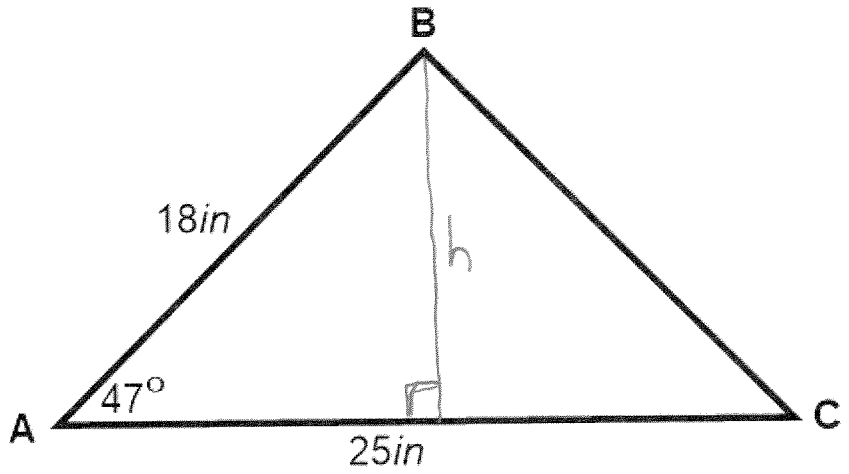
Name Minc Date _____

Math 112: #5 A/B

1. Find the area of the triangle below.



$b = 25\text{in}$

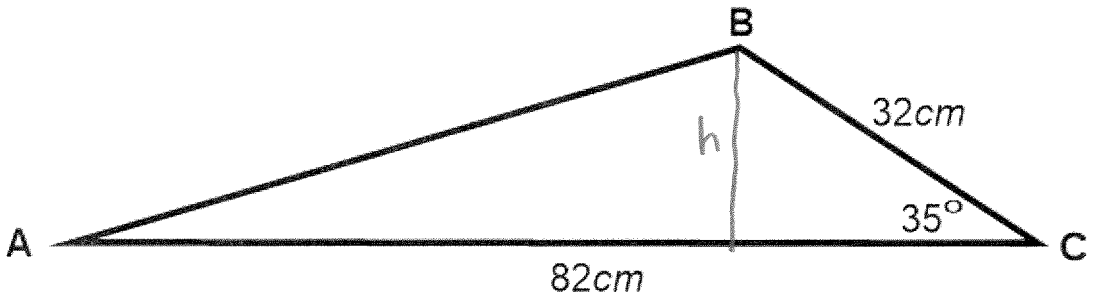
$A = \frac{1}{2}bh$

$\sin 47^\circ = \frac{h}{18}$

$18 \sin 47^\circ = h = 13.16\text{in}$

$A = \frac{1}{2} \cdot 25\text{in} \cdot 13.16\text{in} = 164.5\ \text{in}^2$

2. Find the area of the triangle below.



$A = \frac{1}{2}bh \qquad b = 82cm$

$\sin 35^\circ = \frac{h}{32cm}$

$32cm \sin 35^\circ = h = 18.35cm$

$A = \frac{1}{2} \cdot 82cm \cdot 18.35cm = 752.35\,cm^2$