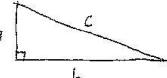
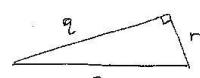


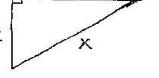
GEOM.  
REVIEW FOR PYTHAGOREAN THM TEST (4.4 + 4.5)

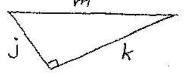
NAME KEY  
DATE \_\_\_\_\_ PER. \_\_\_\_\_

IS THE EQUATION TRUE OR FALSE?

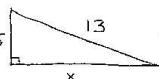
①   
 $a^2 + b^2 = c^2$   
 TRUE

②   
 $p^2 + q^2 = r^2$   
 FALSE

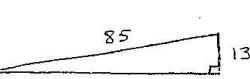
③   
 $\begin{aligned} z^2 &= x^2 - y^2 \\ +y^2 &+ y^2 \\ z^2 + y^2 &= x^2 \end{aligned}$  TRUE

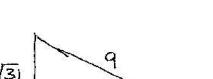
④   
 $(m)^2 = (\sqrt{j^2 + k^2})^2$   
 $m^2 = j^2 + k^2$   
 TRUE

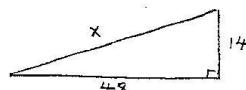
FIND THE LENGTH OF SIDE X. SIMPLIFY (DO NOT ROUND) YOUR ANSWERS. SHOW YOUR WORK.

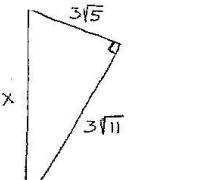
⑤   
 $\begin{aligned} 5^2 + x^2 &= 13^2 \\ 25 + x^2 &= 169 \\ -25 &-25 \\ x^2 &= 144 \\ x &= 12 \end{aligned}$

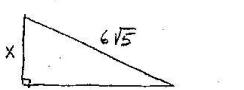
⑥   
 $\begin{aligned} \sqrt{15}^2 + 7^2 &= x^2 \\ 15 + 49 &= x^2 \\ 64 &= x^2 \\ 8 &= x \end{aligned}$

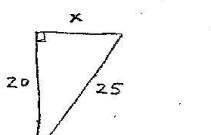
⑦   
 $\begin{aligned} 13^2 + x^2 &= 85^2 \\ 169 + x^2 &= 7225 \\ -169 &-169 \\ x^2 &= 7056 \\ x &= 84 \end{aligned}$

⑧   
 $\begin{aligned} \sqrt{31}^2 + x^2 &= 9^2 \\ 31 + x^2 &= 81 \\ -31 &-31 \\ x^2 &= 50 \\ x &= \sqrt{50} \\ x &= \sqrt{25 \cdot 2} \\ x &= 5\sqrt{2} \end{aligned}$

⑨   
 $\begin{aligned} 14^2 + 48^2 &= x^2 \\ 196 + 2304 &= x^2 \\ 2500 &= x^2 \\ 50 &= x \end{aligned}$

⑩   
 $\begin{aligned} (3\sqrt{5})^2 + (3\sqrt{11})^2 &= x^2 \\ 45 + 99 &= x^2 \\ 144 &= x^2 \\ 12 &= x \end{aligned}$

⑪   
 $\begin{aligned} x^2 + 12^2 &= (6\sqrt{5})^2 \\ x^2 + 144 &= 36 \cdot 5 \\ x^2 + 144 &= 180 \\ -144 &-144 \\ x^2 &= 36 \\ x &= 6 \end{aligned}$

⑫   
 $\begin{aligned} x^2 + 20^2 &= 25^2 \\ x^2 + 400 &= 625 \\ -400 &-400 \\ x^2 &= 225 \\ x &= 15 \end{aligned}$