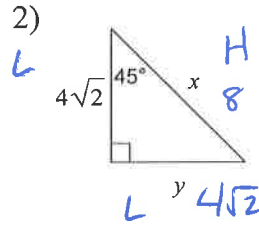
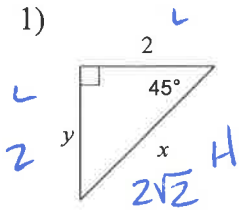
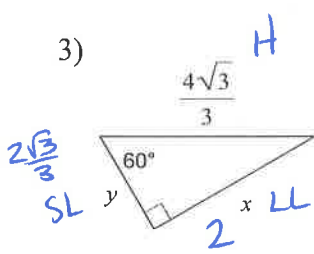


Special Right Triangles Practice - Part 2

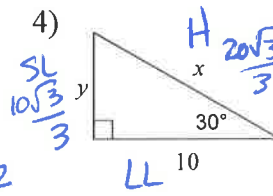
Find the missing side lengths. Leave your answers as radicals in simplest form.



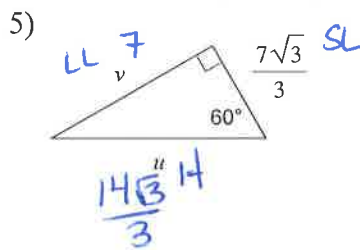
$L \rightarrow H$   
 $4\sqrt{2} \cdot \sqrt{2} = 4\sqrt{4} = 4 \cdot 2 = 8$



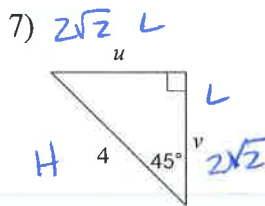
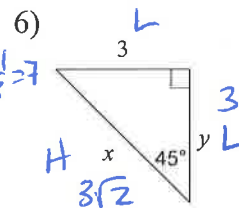
$H \rightarrow SL$   
 $\frac{4\sqrt{3}}{3} \cdot 2 = \frac{4\sqrt{3}}{3} \cdot \frac{2\sqrt{3}}{\sqrt{3}} = \frac{4\sqrt{3} \cdot 2\sqrt{3}}{3\sqrt{3}} = \frac{4 \cdot 2 \cdot 3}{3} = 8$   
 $SL \rightarrow LL$   
 $\frac{2\sqrt{3}}{3} \cdot \sqrt{3} = \frac{2\sqrt{9}}{3} = \frac{2 \cdot 3}{3} = 2$



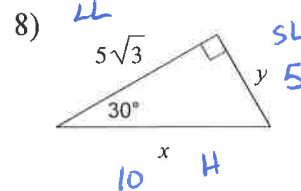
$LL \rightarrow SL$   
 $\frac{10}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{10\sqrt{3}}{\sqrt{9}} = \frac{10\sqrt{3}}{3}$   
 $SL \rightarrow H$   
 $\frac{10\sqrt{3}}{3} \cdot 2 = \frac{20\sqrt{3}}{3}$



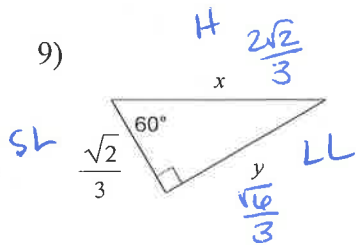
$SL \rightarrow LL$   
 $\frac{7\sqrt{3}}{3} \cdot \sqrt{3} = \frac{7\sqrt{9}}{3} = \frac{7 \cdot 3}{3} = 7$   
 $SL \rightarrow H$   
 $\frac{7\sqrt{3}}{3} \cdot 2 = \frac{14\sqrt{3}}{3}$



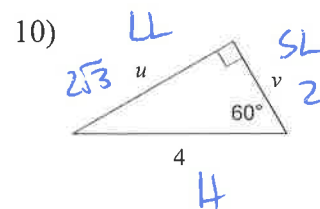
$H \rightarrow L$   
 $\frac{4}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{4\sqrt{2}}{\sqrt{4}} = \frac{4\sqrt{2}}{2} = 2\sqrt{2}$



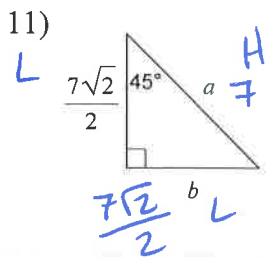
$LL \rightarrow SL$   
 $\frac{5\sqrt{3}}{\sqrt{3}} = 5$   
 $SL \rightarrow H$   
 $5 \cdot 2 = 10$



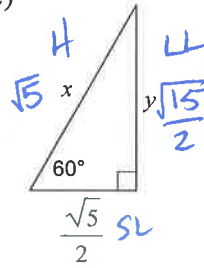
$SL \rightarrow LL$   
 $\frac{\sqrt{2}}{3} \cdot \sqrt{3} = \frac{\sqrt{6}}{3}$   
 $SL \rightarrow H$   
 $\frac{\sqrt{2}}{3} \cdot 2 = \frac{2\sqrt{2}}{3}$



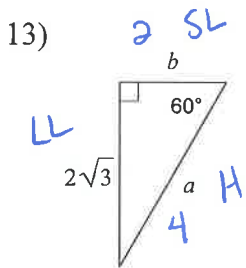
$H \rightarrow SL$   
 $\frac{4}{2} = 2$   
 $SL \rightarrow LL$   
 $2 \cdot \sqrt{3} = 2\sqrt{3}$



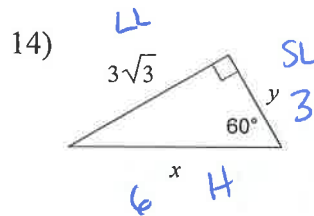
$L \rightarrow H$   
 $\frac{7\sqrt{2}}{2} \cdot \sqrt{2} = \frac{7\sqrt{4}}{2} = \frac{7 \cdot 2}{2} = \frac{14}{2} = 7$



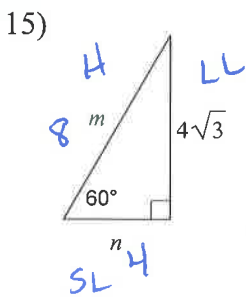
$SL \rightarrow LL$   
 $\frac{\sqrt{5}}{2} \cdot \sqrt{3} = \frac{\sqrt{15}}{2}$   
 $SL \rightarrow H$   
 $\frac{\sqrt{5}}{2} \cdot 2 = \frac{2\sqrt{5}}{2} = \sqrt{5}$



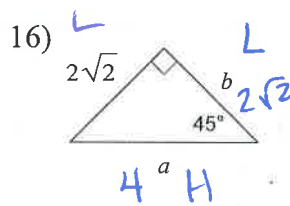
$LL \rightarrow SL$   
 $\frac{2\sqrt{3}}{\sqrt{3}} = 2$   
 $SL \rightarrow H$   
 $2 \cdot 2 = 4$



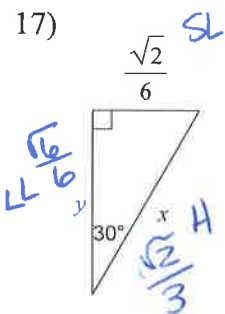
$LL \rightarrow SL$   
 $\frac{3\sqrt{3}}{\sqrt{3}} = 3$   
 $SL \rightarrow H$   
 $3 \cdot 2 = 6$



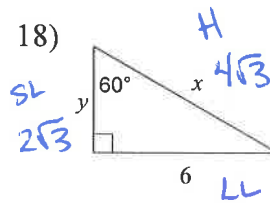
$LL \rightarrow SL$   
 $\frac{4\sqrt{3}}{\sqrt{3}} = 4$   
 $SL \rightarrow H$   
 $4 \cdot 2 = 8$



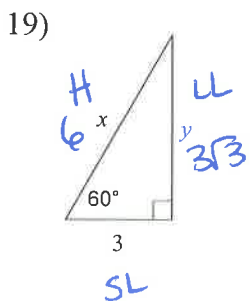
$L \rightarrow H$   
 $2\sqrt{2} \cdot \sqrt{2} = 2\sqrt{4} = 2 \cdot 2 = 4$



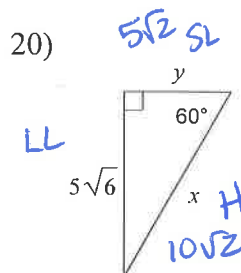
$SL \rightarrow LL$   
 $\frac{\sqrt{2}}{6} \cdot \sqrt{3} = \frac{\sqrt{6}}{6}$   
 $SL \rightarrow H$   
 $\frac{\sqrt{2}}{6} \cdot 2 = \frac{2\sqrt{2}}{6} = \frac{\sqrt{2}}{3}$



$LL \rightarrow SL$   
 $\frac{6}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{6\sqrt{3}}{\sqrt{9}} = \frac{6\sqrt{3}}{3} = 2\sqrt{3}$   
 $SL \rightarrow H$   
 $2\sqrt{3} \cdot 2 = 4\sqrt{3}$



$SL \rightarrow LL$   
 $3 \cdot \sqrt{3} = 3\sqrt{3}$   
 $SL \rightarrow H$   
 $3 \cdot 2 = 6$

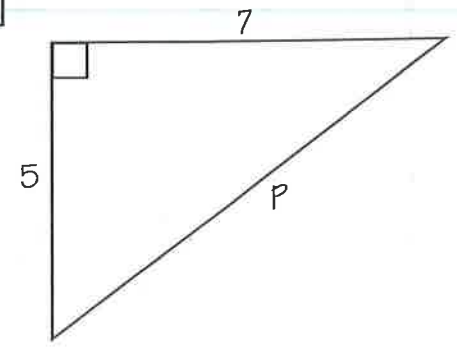
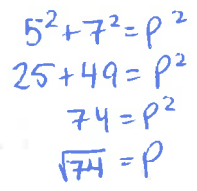
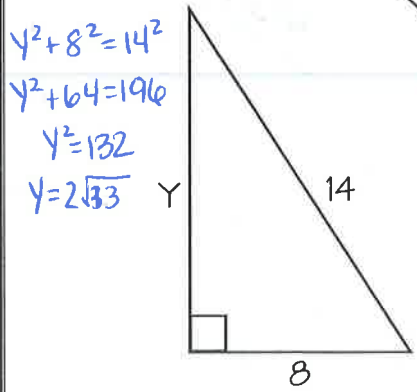
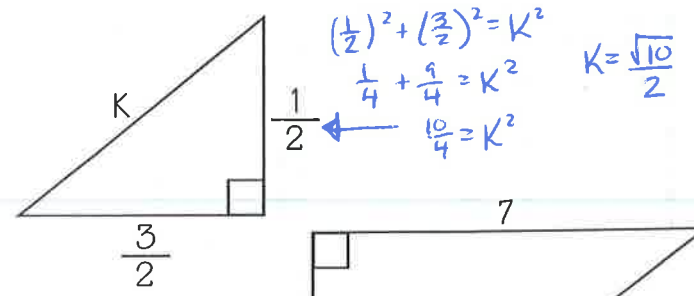
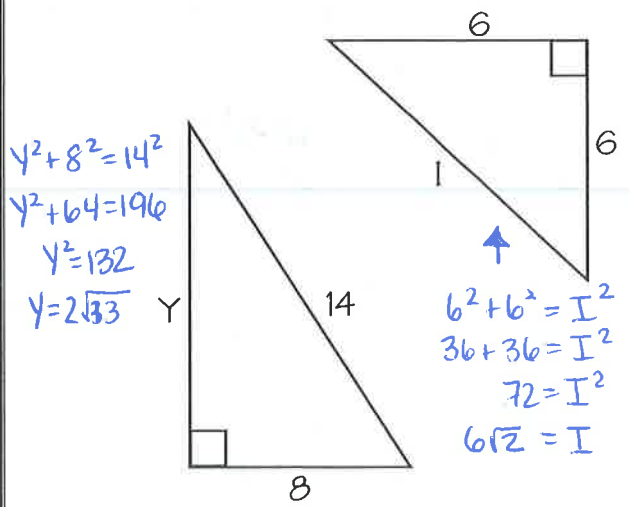
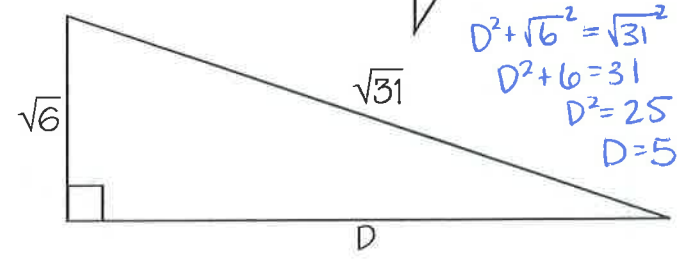
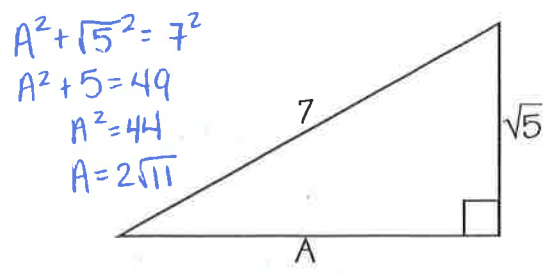
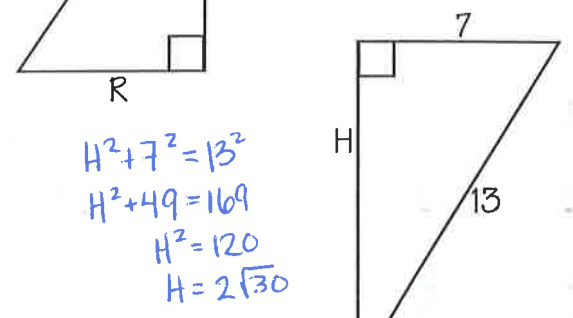
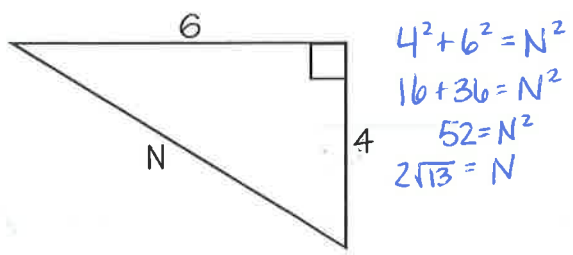
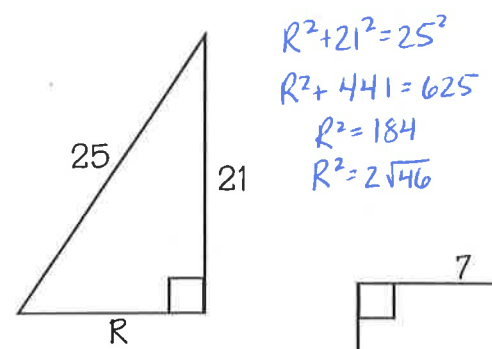
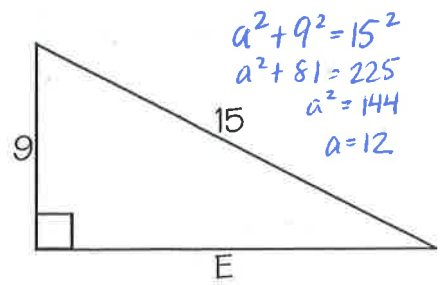


$LL \rightarrow SL$   
 $\frac{5\sqrt{6}}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{5\sqrt{18}}{\sqrt{9}} = \frac{5\sqrt{18}}{3} = \frac{5\sqrt{9 \cdot 2}}{3} = \frac{5 \cdot 3 \cdot \sqrt{2}}{3} = 5\sqrt{2}$   
 $SL \rightarrow H$   
 $5\sqrt{2} \cdot 2 = 10\sqrt{2}$

Key

# Where is the best place to play "hide and seek?"

Solve for the missing sides. Make sure your answer is both exact and simplified. To figure out the joke, place the letter of each problem above the answer on the line(s) below. Some blanks will go unfilled.

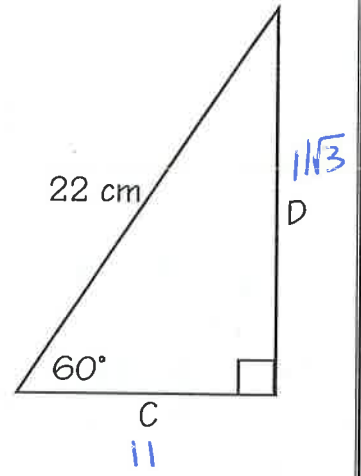
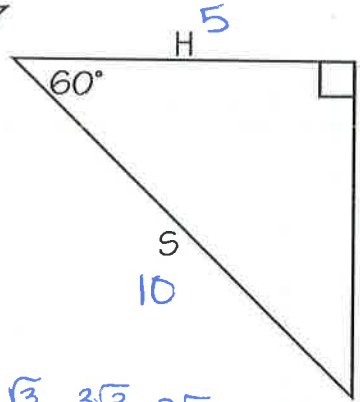
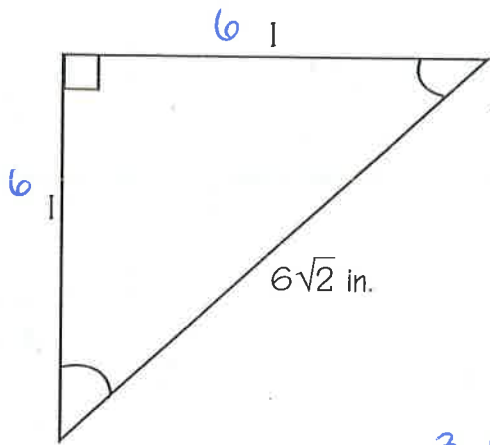
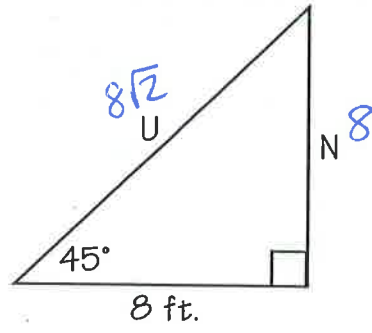
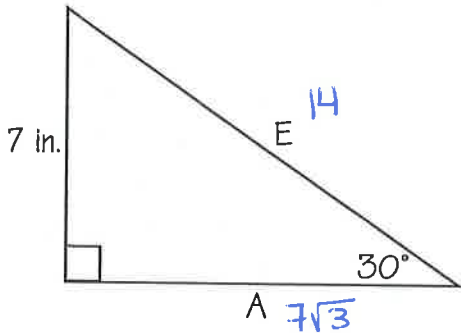


I   N        H   Y   D   E        P   A   R   K  
 $\frac{6\sqrt{2}}{2\sqrt{13}}$     $\frac{\sqrt{11}}{2}$     $\frac{2\sqrt{30}}{2\sqrt{33}}$     $\frac{5}{12}$     $\frac{2}{\sqrt{74}}$     $\frac{2\sqrt{11}}{2\sqrt{46}}$     $\frac{\sqrt{10}}{2}$

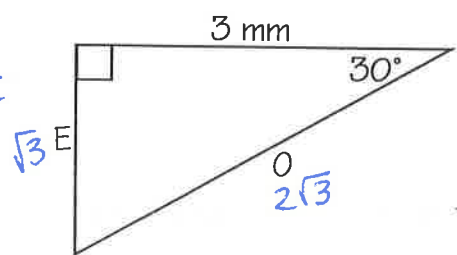
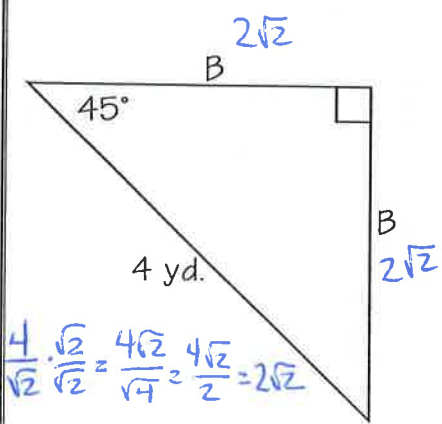
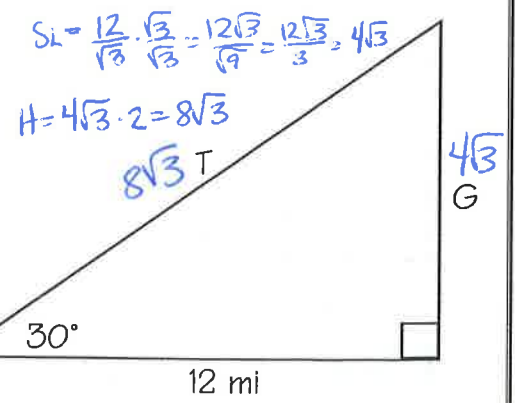
Key

# Why didn't the skeleton cross the road?

Find the missing lengths. To figure out the joke, place the letter of each problem above the answer on the line(s) below.



$SL = \frac{3}{18} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{3\sqrt{3}}{18} = \frac{3\sqrt{3}}{3} = \sqrt{3}$   
 $H = \sqrt{3} \cdot 2 = 2\sqrt{3}$



$\frac{4}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{4\sqrt{2}}{\sqrt{4}} = \frac{4\sqrt{2}}{2} = 2\sqrt{2}$

$\frac{B}{2\sqrt{2}}$   $\frac{E}{\sqrt{3}}$   $\frac{C}{11}$   $\frac{A}{7\sqrt{3}}$   $\frac{U}{8\sqrt{2}}$   $\frac{S}{10}$   $\frac{E}{14}$   $\frac{I}{9}$   $\frac{T}{6}$   $\frac{T}{8\sqrt{3}}$

$\frac{H}{5}$   $\frac{A}{7\sqrt{3}}$   $\frac{D}{11\sqrt{3}}$   $\frac{N}{4}$   $\frac{O}{8}$   $\frac{O}{2\sqrt{3}}$   $\frac{G}{12}$   $\frac{U}{4\sqrt{3}}$   $\frac{T}{8\sqrt{2}}$   $\frac{I}{8\sqrt{3}}$   $\frac{S}{10}$