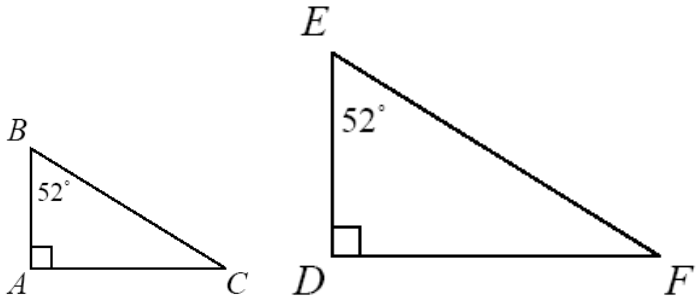
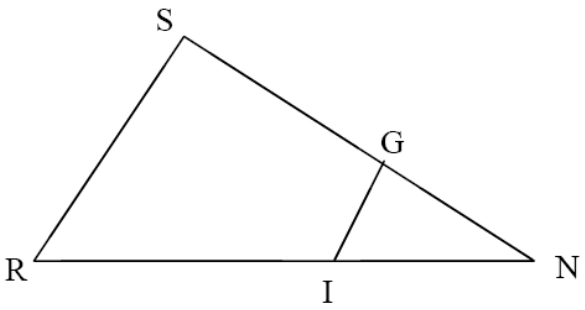
Name: _____

Similar Triangles

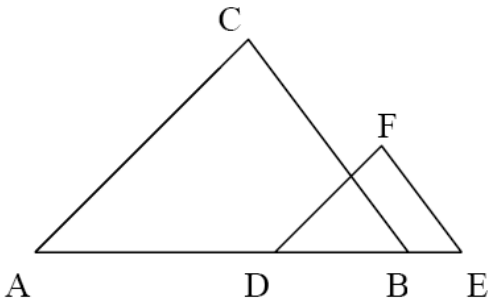
Exercise 1: Consider two right triangles $\triangle ABC$ and $\triangle DEF$ in which $m\angle A = 90$ and $m\angle D = 90$. It is also known that $m\angle B = m\angle E = 52$. Are these two right triangles similar? Justify your answer.



Exercise 2: $\triangle ING \sim \triangle RNS$, $GS=6$ cm, GN=3 cm, RI=(x+5) cm and IN=(x+1) cm. Find the value of x.



Exercise 3: $\overline{AC} \parallel \overline{DF}, \overline{BC} \parallel \overline{EF}$, $AD=6$ cm, DB=4 cm, BE=2 cm, AC=(3x+2) cm and DF=(x+2.8) cm. Find the value of x.



Exercise 4: $\triangle ACE \sim \triangle TOE$, $CO=12$ cm, CE=8 cm, AE=(x+5) cm and ET=(x-2) cm. Find the value of x.