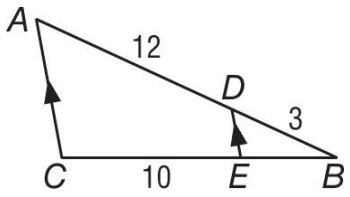
Name_____ Date_____ Period___ Geo w/Trig

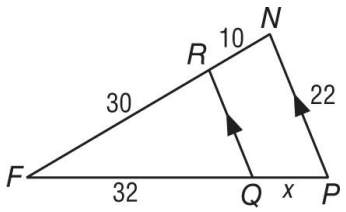
Practice with Similar Triangles & Proportionality

For #1-6, find each missing measurement. Put a star next to each problem you are able to use the Triangle Proportionality Theorem to solve.

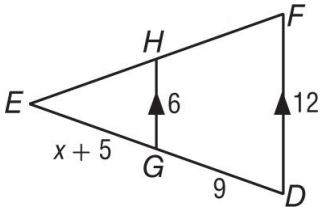
1. *BE*



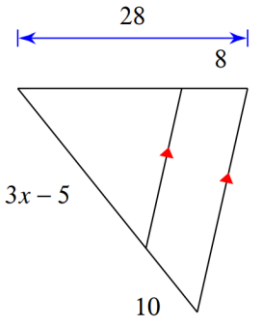
2. *QP*



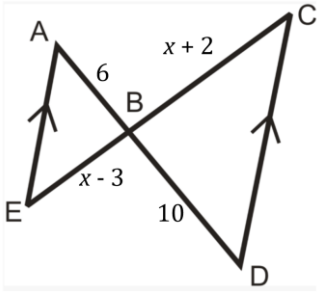
3. *EH*



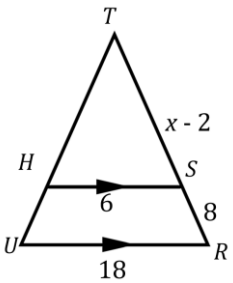
4. *x*



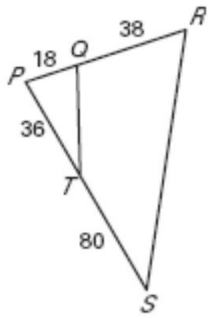
5. *BE, CD*



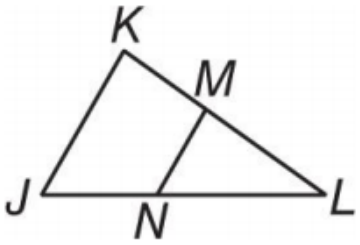
6. *TS*



7. Determine whether $\overline{QT} \parallel \overline{RS}$. Justify your answer.



8. Given $KM = 32$ cm, $ML = 24$ cm, $JN = 36$ cm and $NL = 27$ cm, determine whether $\overline{MN} \parallel \overline{JK}$. Justify your answer.



9. A person 6 feet tall casts a 1.5-foot-long shadow at the same time that a flagpole casts a 7-foot-long shadow. How tall is the flagpole? (Make a sketch)

10. A lighthouse casts a 128-foot shadow. A nearby lamppost that measures 5.25-feet casts an 8-foot shadow. What is the height of the lighthouse? (Make a sketch)

11. What theorem proves the triangles are similar? Write a similarity statement. Then find MH and HC.