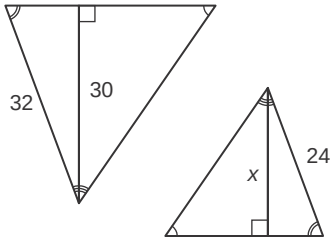
NAME _____ DATE _____ PERIOD _____

7-5 Practice

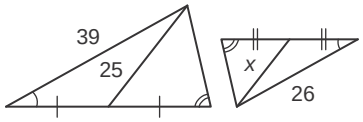
Parts of Similar Triangles

ALGEBRA Find x.

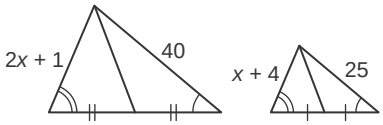
1.



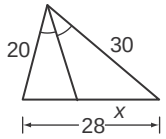
2.



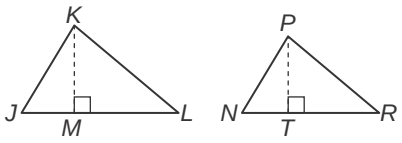
3.



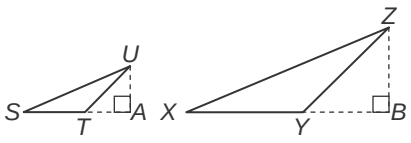
4.



5. If $\triangle JKL \sim \triangle NPR$, is an altitude of $\triangle JKL$, $\overline{PT}$ is an altitude of $\triangle NPR$, $KL = 28$, $KM = 18$, and $PT = 15.75$, find PR.



6. If $\triangle STU \sim \triangle XYZ$, $\overline{UA}$ is an altitude of $\triangle STU$, $\overline{ZB}$ is an altitude of $\triangle XYZ$, $UT = 8.5$, $UA = 6$, and $ZB = 11.4$, find ZY.



7. PHOTOGRAPHY Francine has a camera in which the distance from the lens to the film is 24 millimeters.

a. If Francine takes a full-length photograph of her friend from a distance of 3 meters and the height of her friend is 140 centimeters, what will be the height of the image on the film? (*Hint*: Convert to the same unit of measure.)

b. Suppose the height of the image on the film of her friend is 15 millimeters. If Francine took a full length shot, what was the distance between the camera and her friend?

Lesson 7-5