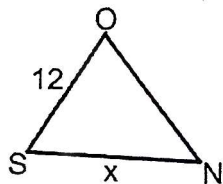
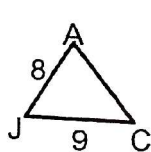


Name Schlansky
Mr. Schlansky

Date _____
Geometry

Finding Missing Sides of Similar Triangles

1. In the diagram, $\triangle JAC$ is similar to $\triangle SON$. Find the measure of SN .

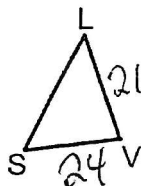


$$\frac{8}{12} = \frac{9}{x}$$

$$\frac{8x}{8} = \frac{108}{8}$$

$$x = 13.5$$

2. In the diagram, $\triangle SLV$ is similar to $\triangle DOR$. If $SV=24$, $DR=16$, $LV=21$, find OR .



$$\frac{21}{24} = \frac{x}{16}$$

$$\frac{24x}{24} = \frac{336}{24}$$

$$x = 14$$

3. Triangle HON is similar to triangle DUR . If $HO=12$, $DU=24$, $UR=18$, find ON .

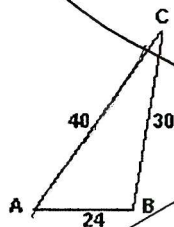


$$\frac{12}{24} = \frac{x}{18}$$

$$\frac{24x}{24} = \frac{216}{24}$$

$$x = 9$$

4. In the diagram, $\triangle ABC$ is similar to $\triangle A'B'C'$, $AB = 24$, $BC = 30$, and $CA = 40$. If the shortest side of $\triangle A'B'C'$ is 6, find the length of the longest side of $\triangle A'B'C'$.

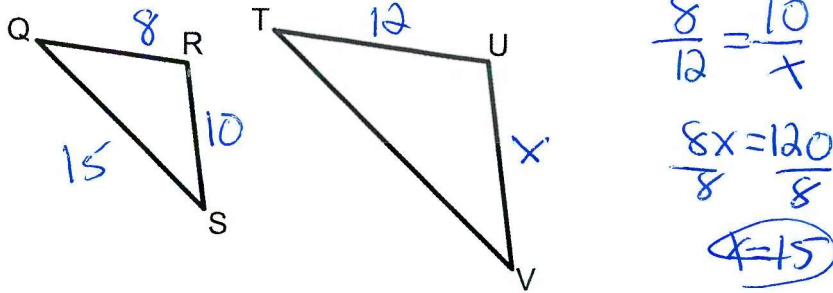


$$\frac{40}{24} = \frac{x}{6}$$

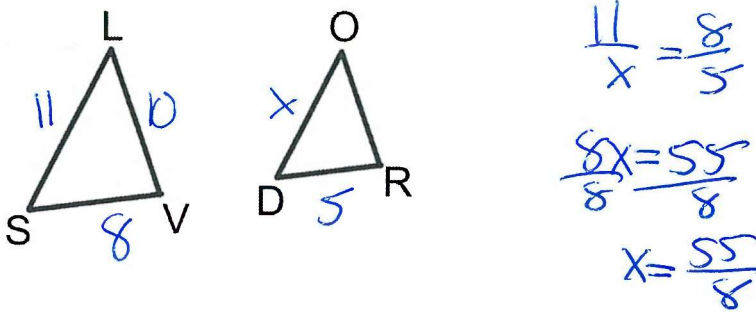
$$\frac{24x}{24} = \frac{240}{24}$$

$$x = 10$$

4. In the diagram below, triangle QRS is similar to triangle TUV. If $QR = 8$, $RS = 10$, $QS = 15$, and $TU = 12$, find UV .



5. In the diagram, $\triangle SLV$ is similar to $\triangle DOR$. If $SV = 8$, $SL = 11$, $LV = 10$, $DR = 5$, find OD .



6. In the diagram, $\triangle ABC$ is similar to $\triangle A'B'C'$, $AB = 24$, $BC = 30$, and $CA = 40$. If the shortest side of $\triangle A'B'C'$ is 6, find the length of the longest side of $\triangle A'B'C'$.

