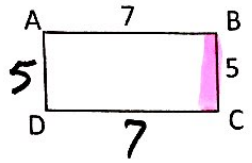
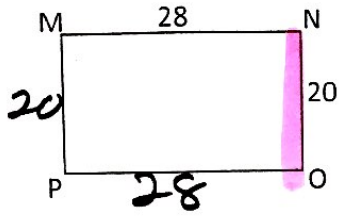
Name: _____

Perimeter Ratios Notes





1. **Find the scale factor of rect ABCD to rect MNOP.**

$\frac{5}{20} = \frac{1}{4}$ SLR

2. **Find the perimeter of each rectangle.**

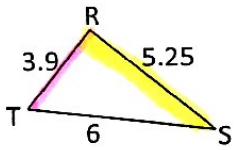
rect ABCD= 24 rect MNOP= 96

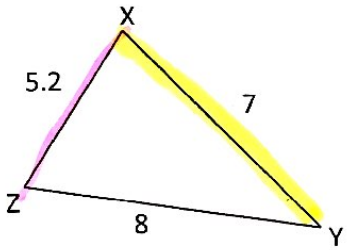
3. **What is the ratio of the perimeter ABCD to MNOP?**

$\frac{24}{96} = \frac{1}{4}$ perimeter ratio

4. **What do you notice about the ratios?**

Same ★





$\frac{3.9}{5.2} = .75$

$\frac{5.25}{7} = .75$ SLR

$\frac{6}{8} = .75$

5. **Find the scale factor of ΔRST to ΔXYZ.**

.75

6. **Find the perimeter of each triangle.**

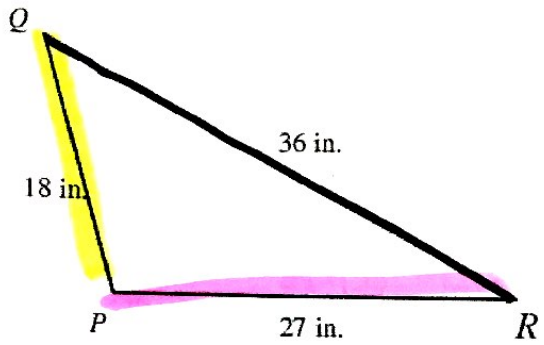
ΔRST= 15.15 ΔXYZ 20.2 $\frac{15.15}{20.2} = .75$ S.F.

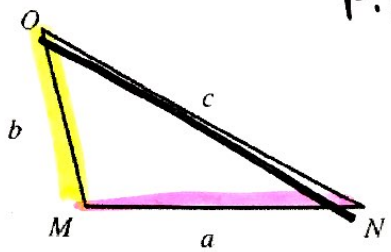
7. **What is the ratio of the perimeter ΔRST to ΔXYZ?**

8. **What do you notice about the ratios?**

Same ~~SLR~~

9. Find *a, b, & c,* if $\Delta PQR \sim \Delta MON$ and the perimeter of ΔMNO is 63 inches.





P.R. $= \frac{81}{63} = \frac{9}{7}$

$p = 63$

$P = 81$

$\frac{9}{7} = \frac{27}{a}$ $\frac{9}{7} = \frac{18}{b}$ $\frac{9}{7} = \frac{36}{c}$

10. Find the perimeter of the larger pentagon if the two pentagons are similar.