

SLR, AR, VR Warm Up Chart

Name: _____

Directions: In the first row, write the equations for Area Ratio and Volume Ratio. Then, use those equations and the ratios given in each row to fill in the rest of the row.

Scale Factor	Area Ratio	Volume Ratio
$SLR = PR$ $1^3/6$	$AR = SLR^2$ $(\frac{1^3}{6})^2 = \frac{169}{36}$	$VR = SLR^3$ $(\frac{1^3}{6})^3 = \frac{2197}{216}$
$1^2/19$ $SLR = \frac{\sqrt{49}}{\sqrt{81}} = \frac{7}{9}$	$AR = \frac{144}{361}$ $49/81$	$VR = \frac{1728}{6859}$ $SLR = \frac{\sqrt{49}}{\sqrt{81}} = \frac{7}{9}$ $VR = SLR^3 (\frac{7}{9})^3 = \frac{343}{729}$
$15/42$	$225/1764$	$3375/74088$
$SLR = \sqrt[3]{VR}$ $= \sqrt[3]{\frac{2197}{6859}} = \frac{13}{19}$	$\frac{169}{361}$	$2197/6859$
$14/9$	$\frac{196}{81}$	$2744/729$
a/b	$\frac{a^2}{b^2}$	$\frac{a^3}{b^3}$