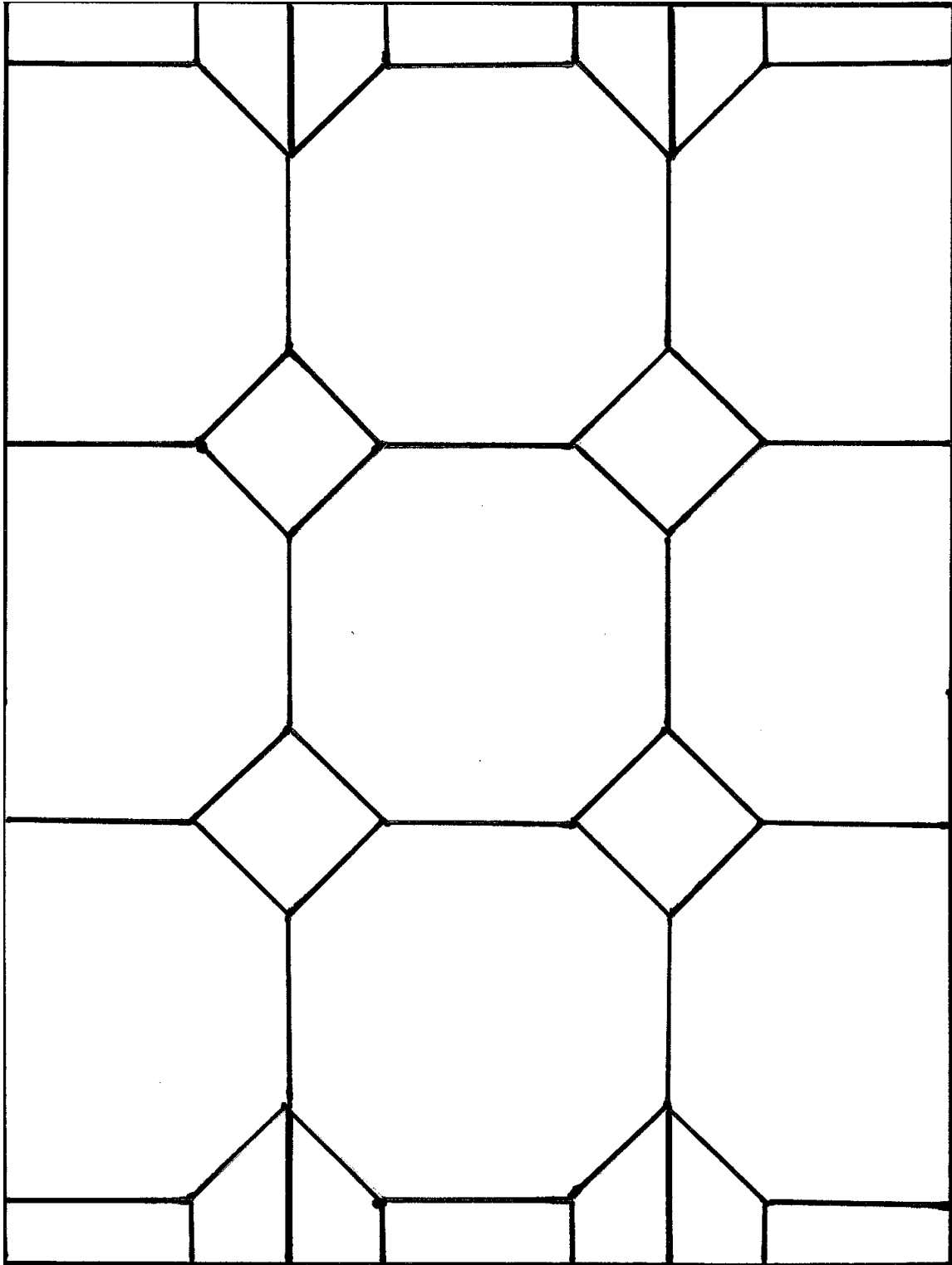




Sample: Geometry - Similar Polygons





Ratio of the actual to the model is  $220/11 = 170/8.5 = 20$

Polygon # 1	Model	Actual
Name	Octagon	
Side 1	1.50 in	$x/1.50 = 20$ , $x=1.5*20$ , $x=30$ in
Side 2	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Side 3	1.50 in	$x/1.50 = 20$ , $x=1.50*20$ , $x=30$ in
Side 4	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Side 5	1.50 in	$x/1.50 = 20$ , $x=1.50*20$ , $x=30$ in
Side 6	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Side 7	1.50 in	$x/1.50 = 20$ , $x=1.50*20$ , $x=30$ in
Side 8	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Perimeter	$1.50*4 + 1.06*4 = 10.24$ in	$x/20 = 10.24$ , $x=10.24*20$ , $x=204.8$ OR $30*4 + 21.*4 = 204.8$



Polygon # 2	Model	Actual
<b>Name</b>	<b>Hexagon</b>	
Side 1	1.50 in	$x/1.50 = 20$ , $x=1.50*20$ , $x=30$ in
Side 2	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Side 3	1.50 in	$x/1.50 = 20$ , $x=1.50*20$ , $x=30$ in
Side 4	2.375 in	$x/2.375 = 20$ , $x=2.375*20$ , $x=47.5$ in
Side 5	1.50 in	$x/1.50 = 20$ , $x=1.50*20$ , $x=30$ in
Side 6	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Perimeter	$1.50 + 1.06 + 1.50 +$ $+2.375 + 1.50 + 1.06 =$ $=8.995$ in	$x/20 = 8.995$ , $x=8.995*20$ , $x=179.9$  OR  $30 + 21.2 + 30 + 47.5 + 30 + 21.2 = 179.9$

Polygon # 3	Model	Actual
<b>Name</b>	<b>Trapezoid</b>	
Side 1	0.50 in	$x/0.50 = 20$ , $x=0.5*20$ , $x=10$ in
Side 2	0.75 in	$x/0.75 = 20$ , $x=0.75*20$ , $x=15$ in
Side 3	1.25 in	$x/1.25 = 20$ , $x=1.25*20$ , $x=25$ in
Side 4	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Perimeter	$0.50 + 0.75 + 1.25 +$ $1.06 = 3.56$ in	$x/20 = 3.56$ , $x=3.56*20$ , $x=71.2$  OR  $10 + 15 + 25 + 21.2 = 71.2$



Polygon # 4	Model	Actual
Name	Quadrilateral ☐	
Side 1	0.50 in	$x/0.50 = 20$ , $x=0.5*20$ , $x=10$ in
Side 2	1.50 in	$x/1.50 = 20$ , $x=1.5*20$ , $x=30$ in
Side 3	0.50 in	$x/0.50 = 20$ , $x=0.5*20$ , $x=10$ in
Side 4	1.50in	$x/1.50 = 20$ , $x=1.5*20$ , $x=30$ in
Perimeter	$0.50*2 + 1.50*2 = 4$ in	$x/20 = 4$ , $x=4*20$ , $x=80$ OR $10*2 + 30*2 = 80$

Polygon # 5	Model	Actual
Name	Rhombus	
Side 1	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Side 2	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Side 3	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Side 4	1.06 in	$x/1.06 = 20$ , $x=1.06*20$ , $x=21.2$ in
Perimeter	$1.06*4 = 4.24$ in	$x/20 = 4.24$ , $x=4.24*20$ , $x=84.8$ OR $21.2*4 = 84.8$