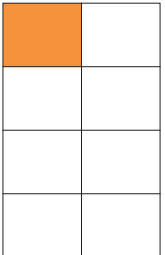
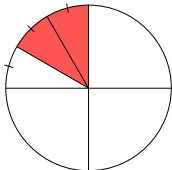
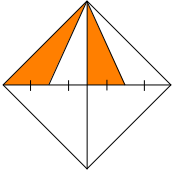
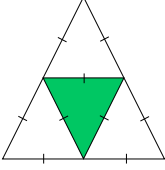
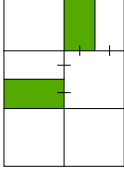
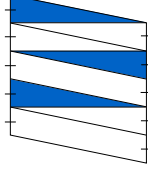
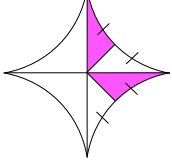


Problem

Some fraction of the surface of each of the given figures in the chart below is shaded. For which figures is the shaded fraction of the figure the same? Reminder: Fractions are equal parts of the whole.

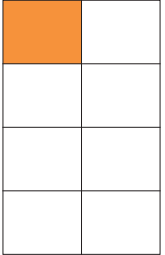
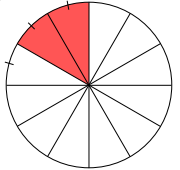
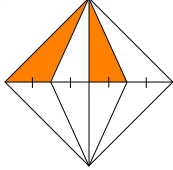
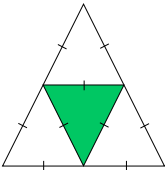

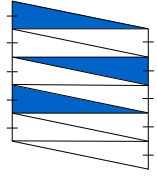
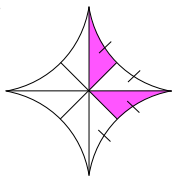
SHAPE	FRACTION SHADED	SHAPE	FRACTION SHADED	SHAPE	FRACTION SHADED
1. 		3. 		5. 	
2. 		4. 		6. 	
				7. 	

Hints

Hint 1 - Draw extra lines on the figures which make equal-sizes pieces.

Hint 2 - How can you compare fractions with different denominators?

Solution

SHAPE	SHADED AREA	SHAPE	SHADED AREA	SHAPE	SHADED AREA
1. 	$\frac{1}{8}$	3. 	$\frac{2}{12}$ or $\frac{1}{6}$	5. 	$\frac{2}{8}$ or $\frac{1}{4}$
2. 	$\frac{1}{4}$	4. 	$\frac{2}{12}$ or $\frac{1}{6}$	6. 	$\frac{3}{10}$
				7. 	$\frac{2}{8}$ or $\frac{1}{4}$

Thus figures 3 and 4 have the same fraction $\left(\frac{1}{6}\right)$ of area shaded, and figures 2, 5, and 7 have the same fraction $\left(\frac{1}{4}\right)$ of area shaded.