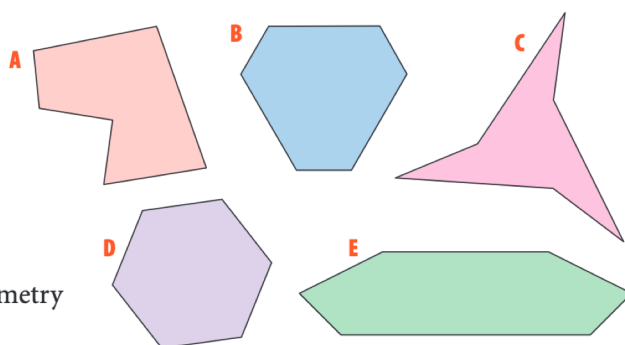


Quiz 08, MAT115R, Spring 2025

Name:

#1 (2 pts) To the left of each letter (e.g. (a)), write the correct letter of the shape satisfying the requirements:

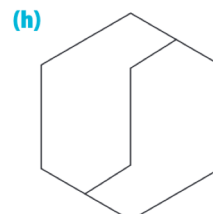
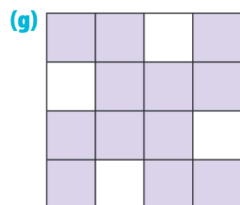
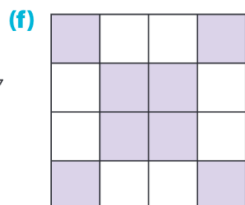
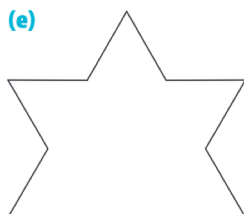
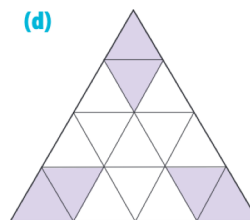
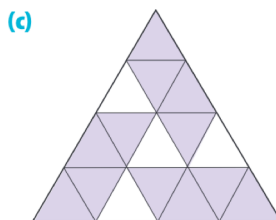
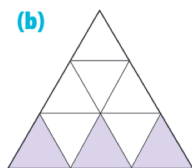
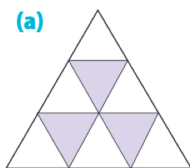
- E1** All these shapes are hexagons.
Which hexagon has
- (a) only one line of symmetry
 - (b) rotation symmetry but no reflection symmetry
 - (c) rotation symmetry of order 3 and 3 lines of symmetry
 - (d) no reflection or rotation symmetry



#2 (3 pts) : Add the appropriate lines of symmetry to each diagram, and write the order of rotation (e.g. "R2") to the left of each figure:

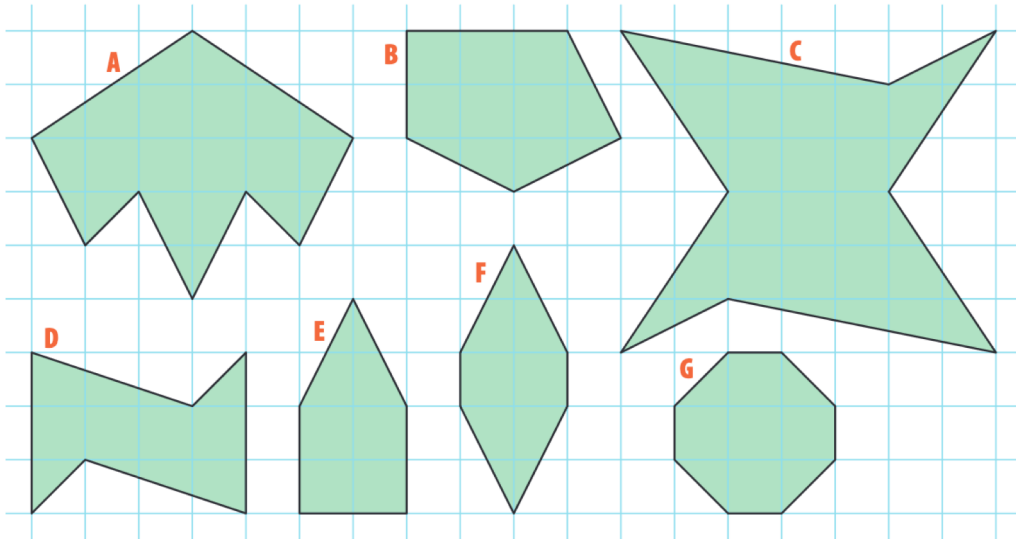
C1 For each design below

- (i) write down how many lines of symmetry it has
- (ii) write down the order of rotation symmetry



#3 (2 pts) : To the left of each letter (e.g. (a)), write the correct letter of the shape satisfying the requirements:

E2 Here are some polygons.



Which of these polygons is

- (a) a pentagon with reflection symmetry
- (b) an octagon with reflection symmetry but no rotation symmetry
- (c) a hexagon with rotation symmetry but no reflection symmetry
- (d) an octagon with rotation symmetry but no reflection symmetry

#4 (3 pts) Draw and identify **the duals** of the Platonic solids represented by these two-dimensional projections:

