Mix/match question to accompany GeoGebra worksheet "Squares: Drawn vs. Constructed"
by Brad Ballinger

Match each *drawn* square with what it was *constructed* to be:

(1) $A_1B_1C_1D_1$	·	·	(a) Square
(2) $A_2B_2C_2D_2$	·	·	(b) Rectangle
(3) $A_3B_3C_3D_3$	·	·	(c) Rhombus
(4) $A_4B_4C_4D_4$	·	·	(d) Parallelogram
(5) $A_5B_5C_5D_5$	·	·	(e) Kite
(6) $A_6B_6C_6D_6$	·	·	(f) Trapezoid
(7) $A_7B_7C_7D_7$	·	·	(g) Isosceles Trapezoid
(8) $A_8B_8C_8D_8$	·	·	(h) Quadrilateral
(9) $A_9B_9C_9D_9$	·	·	(i) _____

How would you fill in the blank for Category (i)?

Most of the polygons fit more than one category, and most of the categories describe more than one polygon. However, each polygon is the best *choice for only one category: the most specific category it belongs to.*

Note that these constructions can be put in some "degenerate" configurations: for example, a square of side length 0 is not really a square.