In-Class Quiz 2:
Functions of several variables (§12.1-12.2)

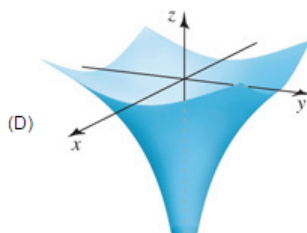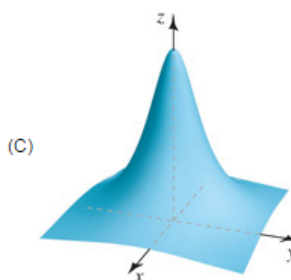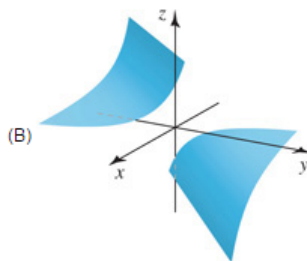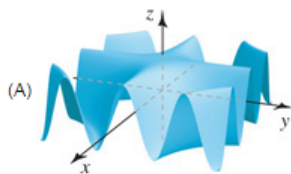**Directions:** This quiz is due at the end of lecture.

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1. Match functions (a)-(d) with surfaces (A)-(D).

   (a) $f(x, y) = \dfrac{6}{x - y}$

   (b) $g(x, y) = \ln(x^2 + y^2)$

   (c) $h(x, y) = \dfrac{1}{1 + x^2 + y^2}$

   (d) $p(x, y) = \cos xy$

2. To which coordinate axes are the following cylinders parallel in $\mathbb{R}^3$?

   (a) $3z^2 + 2y^2 = 9$

   (b) $x^2 + y^2 = 9$

   (c) $x^2 + z^2 = 9$