

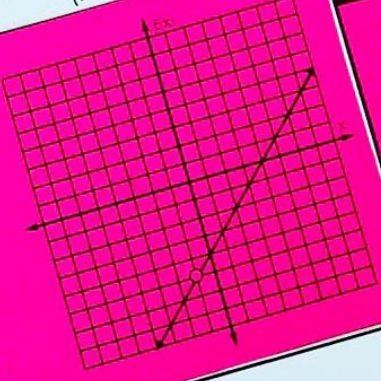
CUT & PASTE ACTIVITY

Continuity of Functions

(Paste in the appropriate location below based on the type of discontinuity)

DISCONTINUITIES

C



removable discontinuity at $x = -2$;

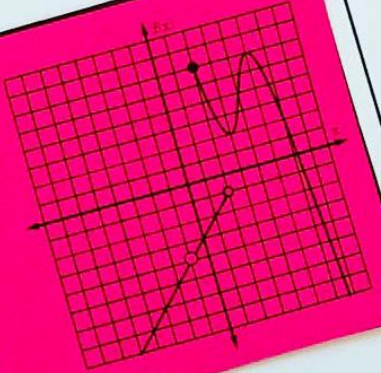
infinite discontinuity at $x = 3$

K



infinite discontinuity at $x = -1$ and $x = 2$

H



removable discontinuity

CONTINUITY of Functions

Created by: ALL THINGS ALGEBRA®

CONTINUITY

of Functions

CUT & PASTE ACTIVITY

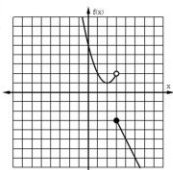
Objective: Students will practice identifying the type and location of discontinuities (infinite, removable, and jump) with this cut and paste activity. There are 12 graphs included: 3 continuous functions and 9 functions with discontinuities. Some graphs have more than one discontinuity.

Directions:

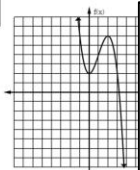
- 1) Distribute the graphic organizer (page 3) and graphs (page 4) to each student. I typically print the template on colored paper and the problems on white paper, or vice versa. This is optional and only makes it pop!
- 2) Students cut out the graphs then analyze each graph for type and location of discontinuities. Continuous functions are placed in the right column of the organizer and functions with discontinuities are placed in the square that describes the type and location of the discontinuities.
- 3) Once the graphs are sorted, they can be pasted onto the template. There is only one correct answer and the box letters will make this very easy to check or grade.

Directions: Cut out the 12 graphs. Identify any discontinuities and paste them on the chart on the space that describes the discontinuities. Place all continuous functions in alphabetical order in the right column.

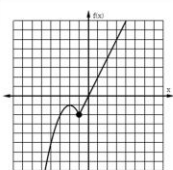
A



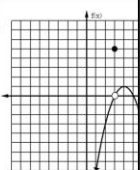
B



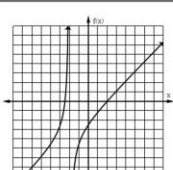
E



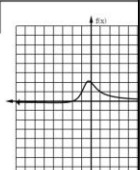
F



I



J



Continuity of Functions Name: _____

DISCONTINUOUS <small>(Paste in the appropriate location below based on the type and location of discontinuities.)</small>			CONTINUOUS <small>(Paste in alphabetical order below.)</small>
removable discontinuity at $x = -1$	jump discontinuity at $x = -1$; infinite discontinuity at $x = 2$	jump discontinuity at $x = -2$	
removable discontinuity at $x = -2$; infinite discontinuity at $x = 3$	infinite discontinuity at $x = -1$ and $x = 2$	removable discontinuity at $x = -1$; jump discontinuity at $x = 2$	
jump discontinuity at $x = 3$	infinite discontinuity at $x = -2$	removable discontinuity at $x = 3$	

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