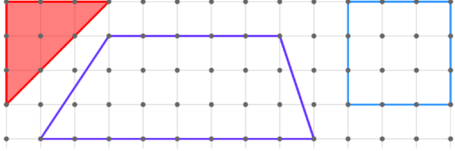
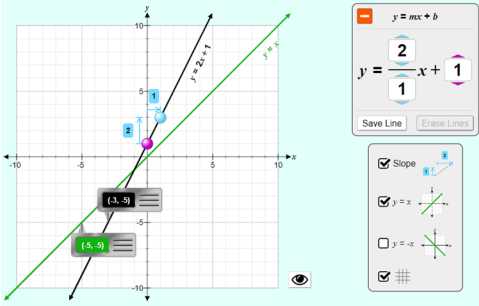
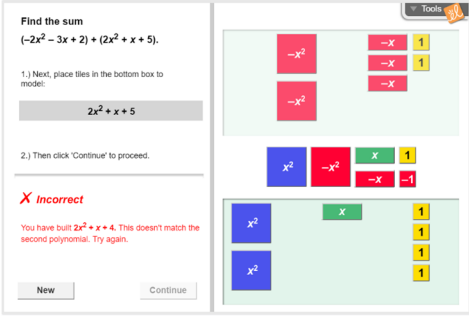
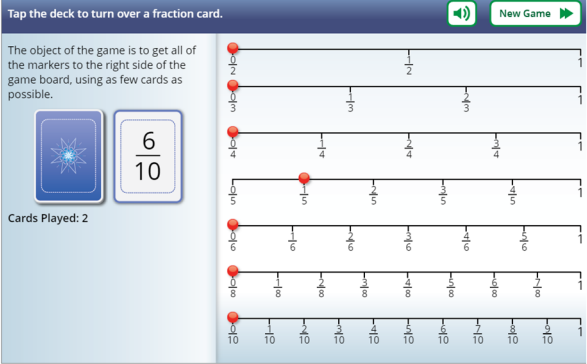


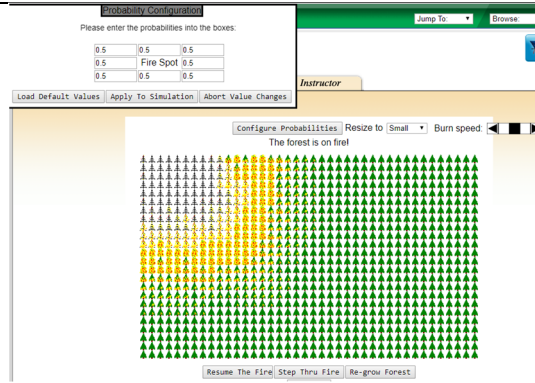
Appendix A

Examples of VMs Used by Teachers During the Professional Development Opportunity

VM Environment	Creator	Example
Single Representation	MathPlayground	 <p style="text-align: center;">Geoboard</p> <p style="text-align: center;">https://www.mathplayground.com/geoboard.html</p>
Multi-Representation	PhET Interactive Simulations	 <p style="text-align: center;">Graphing Slope-Intercept</p> <p style="text-align: center;">https://phet.colorado.edu/sims/html/graphing-slope-intercept/latest/graphing-slope-intercept_en.html</p>
Tutorial	ExploreLearning	 <p style="text-align: center;">Addition of Polynomials</p> <p style="text-align: center;">https://www.explorelearning.com/index.cfm?method=cResource.dspDetail&ResourceID=97</p>
Gaming	NCTM Illuminations	 <p style="text-align: center;">Fraction Game</p> <p style="text-align: center;">https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Fraction-Game/</p>

Simulation

Shodor
Interactivate



Directable Fire

<http://www.shodor.org/interactivate/activities/DirectableFire/>