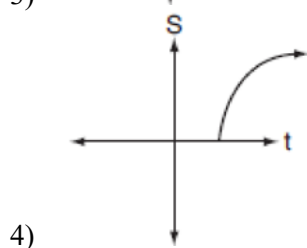
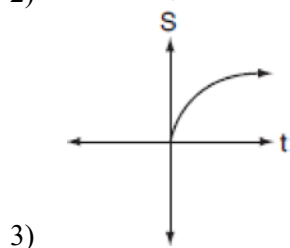
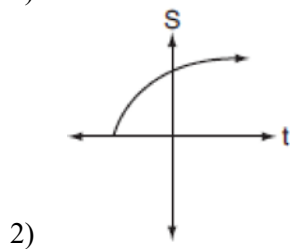
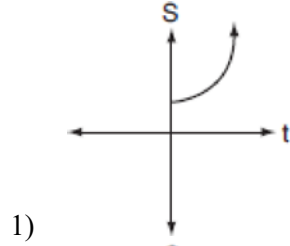
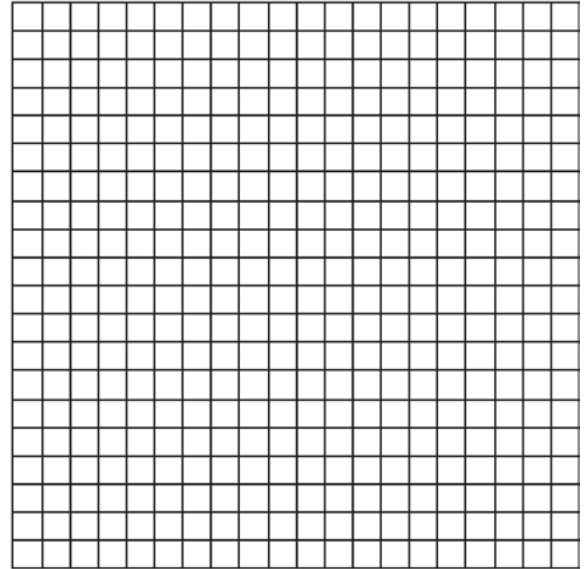


F.IF.C.7: Graphing Root Functions 2

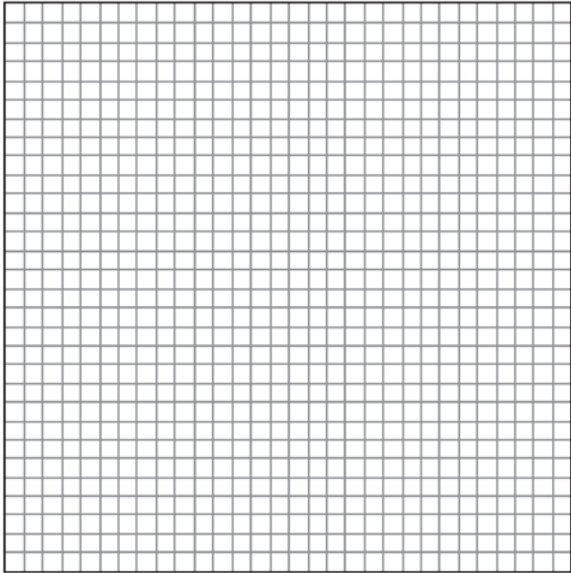
- 1 The formula $S = 20\sqrt{t+273}$ is used to determine the speed of sound, S , in meters per second, near Earth's surface, where t is the surface temperature, in degrees Celsius. Which graph best represents this function?



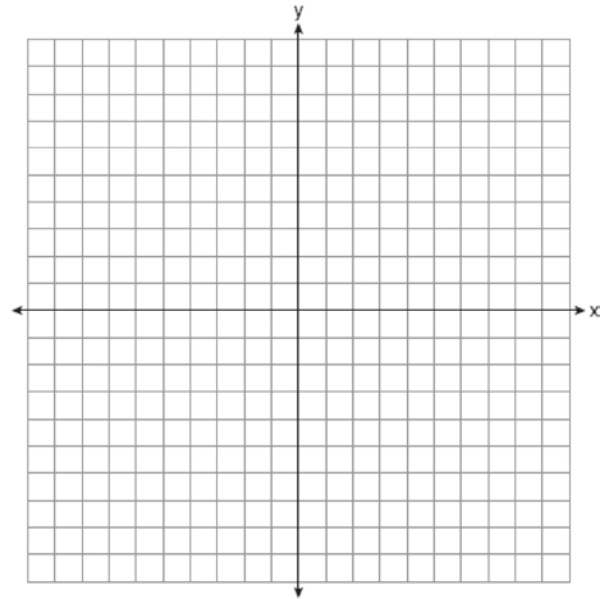
- 2 The equation $V = 20\sqrt{C+273}$ relates speed of sound, V , in meters per second, to air temperature, C , in degrees Celsius. What is the temperature, in degrees Celsius, when the speed of sound is 320 meters per second? [The use of the accompanying grid is optional.]



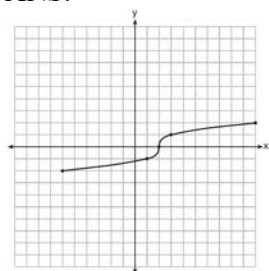
- 3 The number of people, y , involved in recycling in a community is modeled by the function $y = 90\sqrt{3x} + 400$, where x is the number of months the recycling plant has been open. Construct a table of values, sketch the function on the grid, and find the number of people involved in recycling exactly 3 months after the plant opened. After how many months will 940 people be involved in recycling?



- 4 On the set of axes below, graph the function represented by $y = \sqrt[3]{x-2}$ for the domain $-6 \leq x \leq 10$.



4 ANS:



REF: fall1304ai