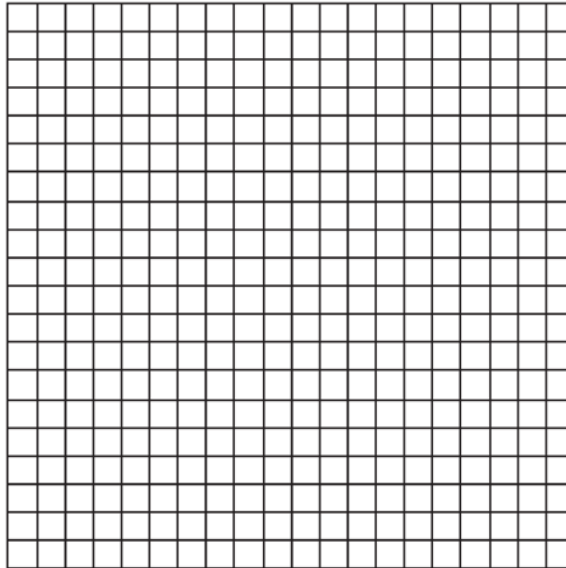
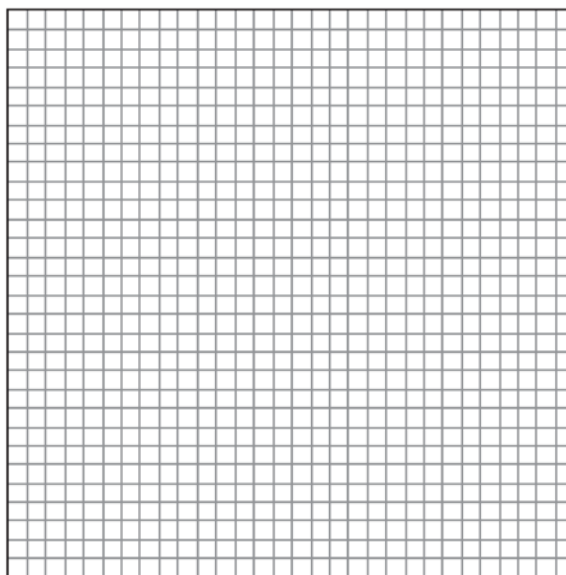


A2.A.22: Solving Radicals 8: Solve radical equations

- 1 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.]



- 2 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?



A2.A.22: Solving Radicals 8: Solve radical equations
Answer Section

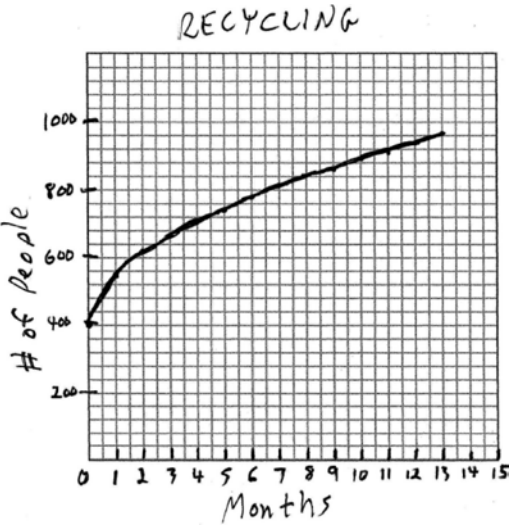
1 ANS:
-17

PTS: 2 REF: 060426b

2 ANS:

X	Y ₁	X	Y ₁
0	400	7	812.43
1	555.88	8	840.91
2	620.45	9	867.65
3	670	10	892.85
4	711.77	11	917.01
5	748.57	12	940
6	781.84	13	962.05

X=0 X=12



670, 12

PTS: 4 REF: 010532b