

Changing the Scale of Graphs

NCTM Standards 2, 3, 4, 5, 6, 7, 8, 9, 10

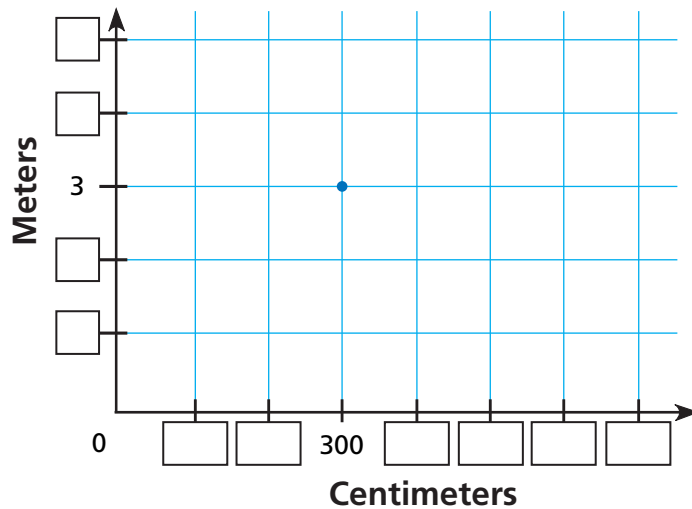
1 Complete the conversion table.

Centimeters			300	400	50	175	
Meters	1	2	3				$\frac{1}{10}$

These graphs are two different ways to show the conversion from centimeters to meters. Finish scaling the graphs, and then draw the graphs using information in the table.

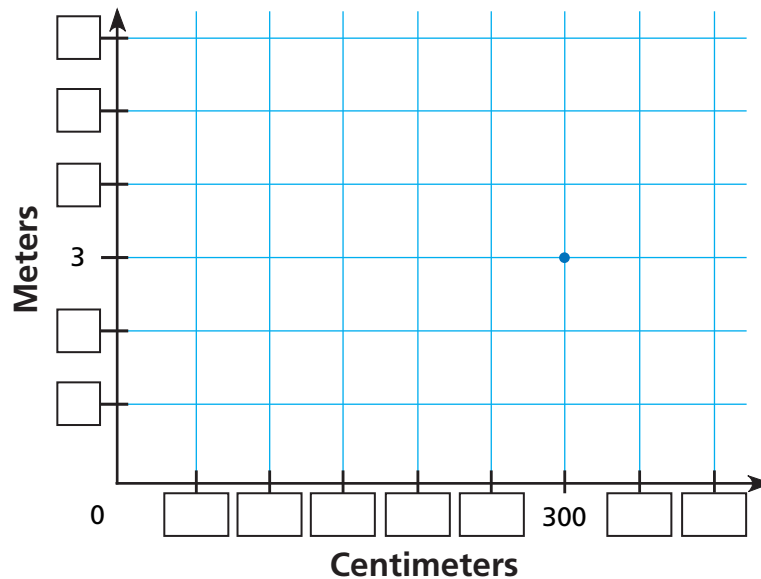
2

CENTIMETERS-METERS CONVERSION



3

CENTIMETERS-METERS CONVERSION



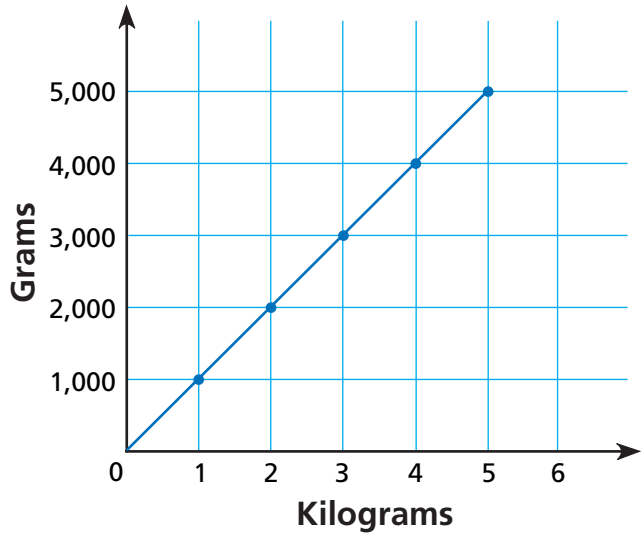


4 In science class, Boon and Hongyi made this graph showing how to convert between grams and kilograms. Next, they needed to make a graph showing how to convert between liters and milliliters.

Boon said, "We don't have to do all that work. We can just copy this graph and change the labels." Is Boon correct?

Explain how they can reuse the graph or why that will not work.

KILOGRAMS-GRAMS CONVERSION



5 **Challenge** All of the points in the table below must follow the rule.

$$y = x^2 \div 2$$

Complete the table and graph the points.

x	2	4	6	5	
y					0

Do all these points lie on one straight line?

