

[Blog Post with Student Work](#)

[7.RP.A.3](#)

[7.EE.A.2](#)

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When you use a copy machine you can select to shrink or increase the size of your copy. If you select 75% on the copy machine, the original copy will keep 75% of its size and lose 25%. In this task, a dollar bill is used in the copy machine. Watch the following two videos to get a better idea of the situation.

1st video is at the top of link

2nd video you must click on “answer” in the middle of the page on the link

<http://www.101qs.com/4-the-incredible-shrinking-dollar>

[Here are the dimensions of the dollar bill](#)

Q1~ After he shrinks the bill in the copy machine nine times, what will the new dimensions be?

Q2~ Draw the original bill and the new bill after it is shrunk nine times to actual size so you can see the difference...

Q3~ What percentage of growth is needed for the tiny dollar bill to get it back to the original in one copy?

Q4~ How many times would he have to shrink the original bill so it would be invisible? (that could mean a lot of things...maybe too small to physically draw)

Q5~ If the government wanted to go to square dollar bills, what percentage of growth or decrease could you do to one of the dimensions to make the original dollar bill square?

Q6~ Each time the dollar bill was shrunk to 75% its original size, what percentage of the area shrank each time?