Inverse Proportion

Seven women can make thirty dresses in one week.
How long would it take four women to make thirty similar dresses?

	Women	Days
Scenario One	7	6
Scenario Two	4	x

As the time will increase as the number of women decrease,
One of the fractions need to be inverted.

Women	Days
7	x
4	6

$4x = 7(6) = 42$
$x = 42 \div 4 = 10\ ½$ days

1. Eleven taps fill a tank in three hours. How long would it take to fill the tank if only six taps are working?

   The tank will fill in _____ hours

2. Nine children share out equally the chocolates in a large tin and get eight each. If there were only six children, how many would each get?

   Each child will receive _____ chocolates

3. The length of an essay is 174 lines with an average of 14 words per line. If it is rewritten with an average of 12 words per line, how many lines will be needed?

   _____ lines will be needed

4. A field of grass feeds 24 cows for six days. How long would the same field feed 18 cows?

   The cows will feed for _____ days

5. The dimensions of a block of stamps are 30 cm wide by 20 cm high. The same number of stamps could also have been arranged in a block 24 cm wide. How high would this second block be?

   The second block is _____ cm high

6. A batch of bottles was packed in 25 boxes taking 12 bottles each. If the same batch had been packed in boxes taking 15 each, how many boxes would be filled?

   _____ boxes would be filled

7. When knitting a scarf 48 stitches wide, one ball of wool will give a length of 18 cm. If there had been 54 stitches instead, how long a piece would the same ball give?

   The length of the scarf would be _____ cm

8. In a school, 33 classrooms are required if each class has 32 students. How many classrooms would be required if the class size was reduced to 22?

   There would be _____ students

9. A factory requires 42 machines to produce a given number of articles in 63 days. How many machines would be required to produce the same number of articles in 54 days?

   _____ machines would be required

LIVEWORKSHEETS