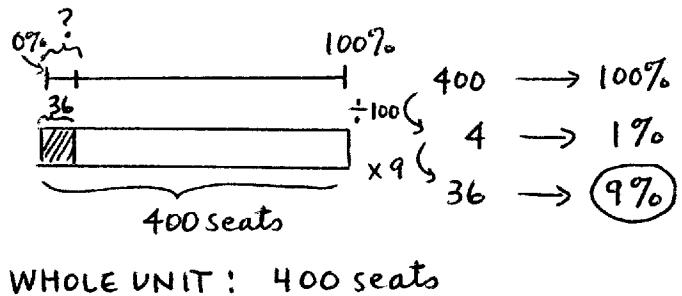


7) (6A, Practice 4A, p 53)

$$(\#6) \quad \frac{36}{400} = 100 \cdot \frac{36}{400}\% = 9\%$$

$$(alt \quad \frac{36}{400} = \frac{9}{100} = 9\%)$$



$$(\#7) \quad \frac{2}{5} = 100 \cdot \frac{2}{5}\% = 40\% \quad \text{WHOLE UNIT: number of students}$$

$$(alt \quad \frac{2}{5} = \frac{4}{10} = \frac{40}{100} = 40\%)$$

$$(\#8) \quad 3m = 300 \text{ cm} \quad \frac{75}{300} = 100 \cdot \frac{75}{300}\% = 25\% \quad \text{WHOLE UNIT: } 300 \text{ cm of cloth}$$

$$(alt \quad \frac{75}{300} = \frac{25}{100} = 25\%) \quad \text{can also do:}$$

$$\begin{array}{rcl} \frac{1}{100} \hookrightarrow 300 & \rightarrow & 100\% \\ \times 25 \hookrightarrow 75 & \rightarrow & 25\% \\ 3 & \rightarrow & 1\% \end{array}$$

(#9)  $22 + 14 = 36$ ,  $45 - 36 = 9$  gold medals

$$\frac{9}{45} = \frac{1}{5} = \frac{20}{100} = 20\% \quad \text{WHOLE UNIT: 45 medals}$$

can also do:  $45 \rightarrow 100\%$   
 $\div 5 \downarrow$   $9 \rightarrow 20\%$

(#10) spent 30% of her savings on a watch

60% of the remainder on a dress; that is,

60% of 70% of her savings which is .6 (70%) or 42% of her savings

Since these are percentages of the same quantity, we can add -

she spent 72% of her savings leaving 28% of her savings

WHOLE UNIT: Kristin's savings

8) (6A, Practice 4C, p 60)

$$(\#1) 1.5 \text{ l} = 1500 \text{ ml} \quad \frac{480}{1500} = 100 \cdot \frac{480}{1500} = 32\%$$

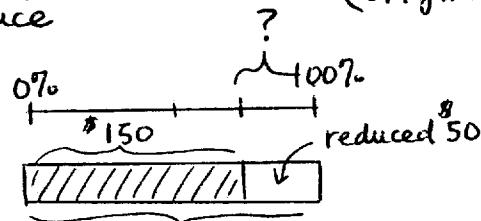
$$(\#2) 2 \text{ hrs} = 120 \text{ mins} \quad \frac{30}{120} = \frac{1}{4} = 25\%$$

$$(\#3) (a) \frac{36}{24} = \frac{3}{2} = 100 \cdot \frac{3}{2}\% = 150\%$$

(b) A is 50% longer than B

$$(\#4) 2.5 \text{ kg} = 2500 \text{ g} \quad \frac{650}{2500} = 100 \cdot \frac{650}{2500} = 26\%$$

$$(\#5) \text{ percent of decrease} = \frac{50}{200} = \frac{1}{4} = 25\% \quad \begin{array}{l} \text{amt of decrease} \\ \text{orig price} \end{array} \quad \begin{array}{l} \text{WHOLE UNIT} = \$200 \\ (\text{original price}) \end{array}$$



$$(\#6) \text{ percent of increase} = \frac{16}{80} = \frac{1}{5} = 20\% \quad \begin{array}{l} \text{amt of increase} \\ \text{orig number} \end{array} \quad \begin{array}{l} \text{WHOLE UNIT} = \\ 80 \text{ members} \\ (\text{number of members} \\ \text{last year}) \end{array}$$

$$(\#7) \text{ percent of increase} = \frac{3}{12} = \frac{1}{4} = 25\% \quad \begin{array}{l} \text{amt of inc} \\ (\text{per Kg}) \end{array} \quad \begin{array}{l} \text{WHOLE UNIT} = \$12 \\ (\text{orig price per Kg}) \end{array}$$

(#8)  $\$60 - \$51 = \$9$  discount

$$\frac{9}{60} = \frac{3}{20} = \frac{15}{100} = 15\% \text{ discount}$$

WHOLE UNIT =  $\$60$  (orig price)

alt/  $\frac{51}{60} = \frac{17}{20} = \frac{85}{100} = 85\%$  11

He paid 85% of orig price;  
so there was a 15% discount

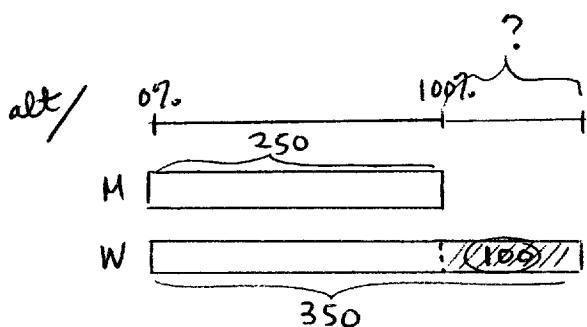
(#9) 600 workers.

$$250 \text{ men} \rightarrow 600 - 250 = 350 \text{ women}$$

How many percent more women than men are there? WHOLE UNIT:  
number of men

There are 100 more women than men

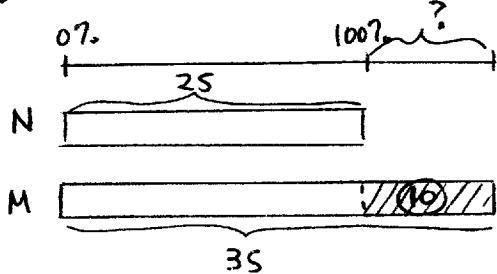
100 is what percent of 250?  $\frac{100}{250} = \frac{2}{5} = \frac{40}{100} = 40\%$



There are 40% more women than men

$$\begin{aligned} 250 &\rightarrow 100\% \\ 50 &\rightarrow 20\% \\ 100 &\rightarrow 40\% \end{aligned}$$

(#10) WHOLE UNIT: Nancy's amt (\$25)



$$\begin{aligned} 25 &\rightarrow 100\% \\ 5 &\rightarrow 20\% \\ 10 &\rightarrow 40\% \end{aligned}$$

Mary saved 40%  
more than Nancy