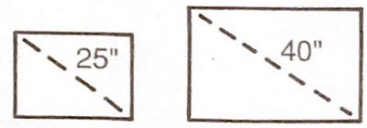


Why Did the Man in the Shower Say, "Soap, Soap, Soap?"

Solve each problem below. (Round percents to the nearest whole percent.) Find your solution and notice the two letters next to it. Write these letters in the two boxes above the exercise number at the bottom of the page.

- NG
WA
RS
2-step
no -- no prop.
2-step
★
- On a math test, Miranda got 17 out of 20 problems correct. What percent of the problems were correct?
 - Last semester, 150 out of the 800 students at Jungle Junior High made the Honor Roll. What percent of the students made the Honor Roll?
 - The width of a singles tennis court is 75% of the width of a doubles court. A doubles court is 36 feet wide. How wide is a singles court?
 - About 60% of the human body is water. At this rate, how many pounds of water are in the body of a 95-pound person?
 - Tapes-R-Us is having a sale on HQ tape players. The regular price is \$60. The discount is \$18. What percent discount is this?
 - Mr. John Doe was figuring out his federal income tax. His income was \$26,800, but he was able to subtract \$5,500 in deductions. He paid 15% of the remaining income in tax. How much did he pay?
 - Steve put \$500 into a savings account. At the end of one year, he had earned \$30 in interest. What interest rate was the bank paying?
 - At Marble Middle School, 35% of the students are 6th graders, 32% are 7th graders, and the rest are 8th graders. What percent are 8th graders?
 - Mr. Spoke is a salesman at Pop's Cycle Shop. Each month he earns \$800 plus 7% of his total monthly sales. How much did he earn last month if his sales totaled \$9,200?
 - The area of a 25-inch TV screen is 300 square inches. The area of a 40-inch TV screen is 768 square inches. The area of the smaller screen is what percent of the area of the larger screen?

- LM 72%
- EW \$3,195
- ED 25 ft
- TA \$1,514
- IN 57 lb
- SS 6%
- SO 37%
- ~~NG 85%~~
- OD \$3,275
- GI \$1,444
- HE 30%
- ~~RS 27 ft~~
- AP 59 lb
- BA 39%
- AF 33%
- NT 8%
- ~~WA 19%~~



H	E	W	A	S	S	I	N	G	I	N	G	A	F	E	W	B	A	R	S
5	2	7	4	9	1	8	6	10	3										

① Correct $\frac{17}{20} = \frac{85}{100}$ 85%
 scale up $\times 5$

$$\frac{\text{Part}}{\text{whole}} = \frac{\%}{100}$$

② $\frac{150}{800} = \frac{18.75}{100}$
 scale down $\div 8$
 $18.75 \approx 19\%$

$$\begin{array}{r} 18.75 \\ 8 \overline{) 150.00} \\ \underline{-8} \\ 70 \\ \underline{-64} \\ 60 \\ \underline{-56} \\ 40 \end{array}$$

③ $\frac{5}{d} = \frac{75}{100} = \frac{3}{36}$ 27 feet
 $\div 25 \rightarrow \frac{3}{4} = \frac{27}{36}$
 $\times 9$

④ $\frac{60}{100} = \frac{57}{95}$ 57 lbs
 $\div 20 \rightarrow \frac{3}{5} = \frac{57}{95}$
 $\times 19$

⑧ $\begin{array}{r} 6^{\text{th}} = 35\% \\ + 7^{\text{th}} = 32\% \\ \hline 6+7^{\text{th}} \text{ graders} = 67\% \end{array}$ $\begin{array}{r} 100\% \\ - 67\% \\ \hline 33\% \\ \text{8th graders} \end{array}$
 No proportion necessary

⑤ $\frac{18}{60} = \frac{30}{100}$ 30%
 $\div 6 \rightarrow \frac{3}{10} = \frac{30}{100}$
 $\times 10$

⑨ $\frac{7}{100} = \frac{\text{\$ earned in addition to \$800}}{9200}$
 $\times 92 \rightarrow$
 add'l $\text{\$ earned} = 644$
 $800 + 644 = \boxed{\text{\$1444}}$

⑥ $\begin{array}{r} 26,800 \\ - 5,500 \\ \hline \text{\$ } 21,300 \text{ taxable income} \end{array}$
 $15\% \text{ of } 21,300$
 $\frac{15 \times 213}{100} = \frac{3195}{100} = 31.95$
 $\times 213 \rightarrow$
 $\text{\$ } 3195 \text{ tax}$

⑩ $\frac{300}{768} = \frac{p}{100}$
 $\div 6 \rightarrow \frac{50}{128} = \frac{p}{100}$

⑦ $\frac{30}{500} = \frac{6}{100}$ 6%
 $\div 5$

$\frac{50}{128} = \frac{p}{100}$
 $\times 2 \rightarrow \frac{25}{64} = \frac{p}{100}$
 $2500 = 64p$
 $2500 \div 64 = 39\%$