

Homework #24 - Solving Proportions

Solve the following proportion. Round to the nearest hundredth if necessary.

<p>1) $\frac{k}{3} = \frac{90}{10}$</p> <p>$\frac{k}{3} = \frac{90}{10}$</p> <p>$10k = 270$</p> <p>$\frac{10k}{10} = \frac{270}{10}$</p> <p>$k = 27$</p>	<p>2) $\frac{15}{5} = \frac{y}{4}$</p> <p>$\frac{15}{5} = \frac{y}{4}$</p> <p>$5y = 60$</p> <p>$\frac{5y}{5} = \frac{60}{5}$</p> <p>$y = 12$</p>
<p>3) $\frac{64.3}{63} = \frac{93.8}{a}$</p> <p>$\frac{64.3}{63} = \frac{93.8}{a}$</p> <p>$64.3a = 5909.4$</p> <p>$\frac{64.3a}{64.3} = \frac{5909.4}{64.3}$</p> <p>$a = 91.90$</p>	<p>4) $\frac{21}{c} = \frac{94.5}{20}$</p> <p>$\frac{21}{c} = \frac{94.5}{20}$</p> <p>$94.5c = 420$</p> <p>$\frac{94.5c}{94.5} = \frac{420}{94.5}$</p> <p>$c = 4.44$</p>

5) At the store, beef jerky was \$73.70 for 5 pounds. If you bought 7 pounds, how much would it cost? SHOW ALL WORK.

$\frac{\$}{\text{pounds}}$

$\frac{\$73.70}{5 \text{ lbs}} = \frac{x}{7 \text{ lbs}}$

~~$\frac{\$73.70}{5 \text{ lbs}} = \frac{x}{7 \text{ lbs}}$~~

$5x = 515.9$

~~$\frac{5x}{5} = \frac{515.9}{5}$~~

$x = \$103.18$

6) If Paige can type 15 words in 60 seconds, how seconds would it take for Paige to type 65 words? SHOW ALL WORK.

$\frac{\text{Words}}{\text{Seconds}}$

$\frac{15 \text{ words}}{60 \text{ Sec.}} = \frac{65 \text{ words}}{x \text{ Sec.}}$

~~$\frac{15 \text{ words}}{60 \text{ Sec.}} = \frac{65 \text{ words}}{x \text{ Sec.}}$~~

$15x = 3900$

~~$\frac{15x}{15} = \frac{3900}{15}$~~

$x = 260 \text{ Sec.}$