6.3 Solving Proportions

Proportion
two ratios that are equal to each other

$\frac{2}{5} = \frac{4}{10}$

$\frac{6}{13} = \frac{x}{52}$ (×4 on both sides) $x = 24$

$\frac{7}{9} = \frac{x}{5}$ we use the cross product property to solve

$7 \cdot 5 = 9 \cdot x$

$\frac{35}{9} = \frac{9x}{9}$

$3\frac{8}{9} = x$ $x = 3.\overline{8}$

If 4 tires cost $256 how much will 10 cost

$\frac{4}{256} = \frac{10}{x}$

$\frac{2560}{4} = \frac{4x}{4}$

$640 = x$

If 12 students out of a class of 25 said they like the early outs. How many students in a school of 325 would like the early outs

$\frac{12}{25} = \frac{x}{325}$

$\frac{3900}{25} = \frac{25x}{25}$

$156 = x$

The price for 12 kw hours was $.63 how many kwhrs were used if the bill was $28.53

$\frac{12}{0.63} = \frac{x}{28.53}$

$\frac{12 \cdot 28.53}{0.63} = \frac{0.63x}{0.63}$

$543.4 = x$