## Solving System of Equations - Practice

## Answer Key

1. Let $\mathrm{x}=$ the number of toppings Let $\mathrm{y}=$ price per pizza

$$
\begin{aligned}
& 6.80+0.9 x=y \\
& 7.30+0.65 x=y \\
& x=2 \\
& y=8.60
\end{aligned}
$$

There needs to be two toppings on each pizza for them to equal in price at $\$ 8.60$.
2. Let $\mathrm{x}=$ the number of CDs sold last week Let $\mathrm{y}=$ the number of CDs sold this week
$x=6+3 y$
$x+y=110$
$\mathrm{x}=84$
$y=26$
Last week the store sold 84 CDs. This week, they sold 26.
3. Let $\mathrm{x}=$ the length of the rectangle Let $\mathrm{y}=$ the width of the rectangle
$2 \mathrm{x}+2 \mathrm{y}=86$
$\mathrm{x}=3 \mathrm{y}$
$\mathrm{x}=32.25$
$y=10.75$
The rectangle has a length of 32.25 and a width of 10.75
4. Let $x=$ the number of sundaes sold

Let $y=$ the number of banana splits sold
$2 x+3 y=156$
$y+8=x$
$\mathrm{x}=36$
$y=28$
The store sold 36 sundaes and 28 banana splits
5. Let $x=$ the cost of one piece of fudge Let $y=$ the cost of one piece of bubble gum

$$
\begin{aligned}
& 5 x+3 y=5.70 \\
& 2 x+10 y=3.60 \\
& x=1.05 \\
& y=0.15
\end{aligned}
$$

One piece of fudge cost 1.05 and one piece of bubble gum cost 0.15 .

