1. (a) no solution. Note: no solution means no solution for all of the variables.
   (b) x=10, y=3, z=0

2. Parametric solution:
   $x = -8 + 4z$
   $y = 33 - 5z$
   $z = any\ number$

   We can not buy a part of an animal. So all of the variables must be an integer. We also know that all of the variables must be greater than or equal to zero.

$x \geq 0$	$y \geq 0$	$z \geq 0$
$-8 + 4z \geq 0$	$33 - 5z \geq 0$	
$4z \geq 8$	$33 \geq 5z$	
$z \geq 2$	$33/5 \geq z$	
	$z \leq \frac{33}{5} \approx 6.6$	

   In addition we know that the variables can not be any larger than 25

$x \leq 25$	$y \leq 25$	$z \leq 25$
$-8 + 4z \leq 24$	$33 - 5z \leq 24$	
$4z \leq 32$	$7 \leq 5z$	
$z \leq 8$	$7/5 \leq z$	
	$z \geq \frac{7}{5} \approx 1.4$	

   Taken all together, we find that $z = 2, 3, 4, 5, 6$.