Math 111 Second Probability Worksheet

Names:

1. Express as a single fraction (does not need to be reduced):
   (a) $1-\frac{3}{8}$

   (b) $\frac{1}{3}+\frac{2}{5}$

   (c) $2\frac{5}{9}$

2. Graph each on a number line, and express each interval in the simplest possible form.
   (a) $[4,20]\cup(8,25)$

   (b) $[4,20]\cap(8,25)$

   (c) $(4,20]\cup[8,10)$

   (d) $(4,20]\cap[8,10)$

   (e) $[4,9)\cup[12,14)$

   (f) $[4,9)\cap[12,14)$

   (g) $(-\infty,3]\cap[1,9)$

   (h) $[3,9]\cup(1,\infty)$

3. Suppose we choose a real number at random (all equally likely) from the interval $[10,60]$. Find the probability that our number is in
   (a) $[20,35]$

   (b) $[15.3, 42.9]$

   (c) $[20,45]\cap[25,50]$

   (d) $[20,30]\cup[25,50]$