152 Quiz 8 Name: _____

Recall that the formula for "n choose k" is

$$\binom{n}{k} = \frac{n!}{k!(n-k)!}$$

and also recall that it is better not to use the formula, or if you do then cancel first and multiply last.

1. Find $\binom{10}{3}$

2. Without doing any more work, find $\binom{10}{7}$

3. If you flip a coin ten times, how many ways can you get 3 "heads" and 7 "tails"?

4. Find $\binom{5}{2}$

5. If you toss a die 5 times, how many ways can you get exactly 2 "sixes"?