Name $\qquad$ Class $\qquad$
<Show all work on calculations. Include proper units. Explanations require complete sentences.>

1) Which of the three angles gives the largest range, time of flight and max height .
2) Of 30 degrees and 60 degrees, which angle would a football player wish to kick a ball so that his teammates have the best chance of running downfield and tackling the opposing player that catches the ball ?
3) Of 30 degrees and 60 degrees, which angle would a baseball player wish to throw a ball so that his throw beats an opposing runner to the next base ?
4) If the shell is launched at 30 degrees, what happens to the time of flight if the angle is increased to 45 degrees ?
5) If the shell is launched at 45 degrees, what happens to the time of flight if the angle is increased to 60 degrees ?
