



7) [4] In isosceles triangle QYP  $\angle Q$  is the vertex angle. An altitude is drawn from Q to side YP intersecting it at point Z.  $m\angle YQZ = 4x + 3$ ,  $m\angle YQP = 10x - 8$ , and  $YP = 27$ . Find QZ to the nearest hundredth.

8) [2] Would 4, 5, and 10 form a right triangle? Justify your answer.

9) [3] Solve:  $5x^2 = 15 - 8x$