Compare A and B if

D1 $A > 1 + m^2$ AND $B < 2*m$

D2 $A \leq 6*n$ AND $B \geq n^2 + 9$

D3 $4*B/A < 3$ AND $A < 0$

D4 $2/A > 3/B$ AND $B > 0$

D5 $3/A \leq 1/B$ AND $A > 0$

Prove inequality

D6 $A/B + B/A \geq 0$, if $A*B > 0$

D7 $\sqrt{(A/B)} \geq 2*A*B / (A + B)$

W1   Thirteen plums weigh as much as two apples and one pear. Four plums and one apple have the same weight as one pear. How many plums have the weight of one pear?

W2   A tourist biked from his base to the station spending 3 hours. If he walked, he would cover this distance for 7 hours. We also know that his speed when biking is 8 mph greater than his speed when walking. What is the distance from the bas to the station?

Q1

Let the lengths of the sides of a triangle be repre-
sented by $x + 3$, $2x - 3$, and $3x - 5$. If the
perimeter of the triangle is 25, what is the length
of the shortest side?

(A) 5
(B) 7
(C) 8
(D) 10
(E) It cannot be determined from the information
     given.

Q2   The smallest angle of a triangle is two-thirds the size of the middle
     angle, and the middle angle is three-sevenths of the largest angle.
     Find all three angle measures.

Solve systems

S1 $2*a + b = 4$ AND $a - 3*b = 9$

S2 $2/x + 1/y = 4$ A   AND $1/x - 3/y = 9$

Simplify

C1 $((U + W) / U \;-\; 2*W / (U + W)) * (U + W)$

C2 $(2*m / (m - n) \;+\; (m - n)/n) * n$

C3 $(1/y \;-\; 1/(z + y)) / (z/y)$