

MASSACHUSETTS MATHEMATICS LEAGUE
NOVEMBER 2004
ROUND 6 PLANE GEOMETRY: ANGLES

ANSWERS

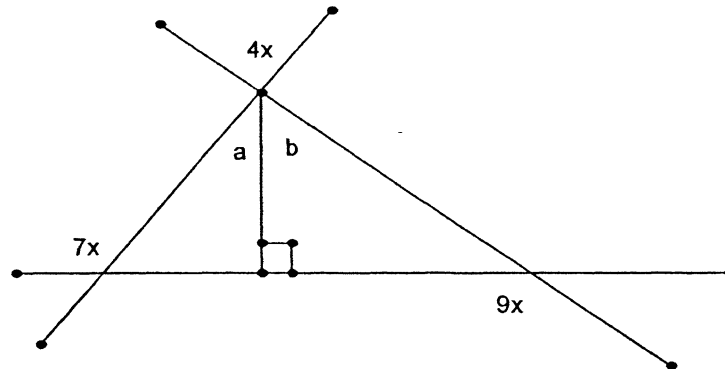
A) _____

B) _____ : _____

C) _____

-
-
- A) Given ABCD an isosceles trapezoid with diagonal \overline{AC} . If $m \angle B = 2x - 5$, $m \angle D = 3x$ and $m \angle ACD = x$, find $m \angle DAC$.

- B) Find the ratio of a to b expressed as a simplified ratio:



- C) The ratio of 2 angles' measures is 4:7 while the ratio of the complement of the smaller angle to the supplement of the larger angle is 7:16. Find the sum of the measures of the two angles.