

Practice

Trapezoids

MATH is an isosceles trapezoid with bases \overline{MA} and \overline{TH} . Use the given information to solve each problem.

- If $MA = 34$ and $HT = 20$, find CD .
- If $HT = 17.6$ and $CD = 28.6$ find MA .
- If $MA = 23.9$ and $CD = 16.4$, find HT .
- If $CD = x + 12$ and $MA + HT = 4x + 3$, find x .
- If $m\angle TAM = 63$, find $m\angle HMA$.
- If $m\angle HCD = 52$, find $m\angle TDC$.
- If $m\angle DCM = 2x$, find $m\angle CMA$ in terms of x .
- If the measure of the median of an isosceles trapezoid is 5.5, what are the possible integral measures for the bases?
- \overline{VW} is the median of a trapezoid that has bases \overline{MN} and \overline{PO} , with V on \overline{OM} and W on \overline{PN} . If the vertices of the trapezoid are $M(2, 6)$, $N(4, 6)$, $P(10, 0)$, and $O(0, 0)$, find the coordinates of V and W .
- \overline{VW} is the median of a trapezoid that has bases \overline{MN} and \overline{PO} , with V on \overline{PM} and W on \overline{ON} . If four of the points are $M(5, 10)$, $N(9, 10)$, $V(3, 7)$, and $W(11, 7)$, find the coordinates of P and O .

