

11.3 Trapezoid Test - Answers
(Samuel Bradshaw, P1)

Always/Sometimes/Never

- 1) A A trapezoid has 4 sides.
- 2) S The median of a trapezoid is 73.

Find the missing base.

- 3) A trapezoid's height is 20 ft, and its area is 700 ft². If one base is 15 ft, find the other base.

$$\begin{aligned}A &= 1/2h(b_1+b_2) \\700 &= 1/2(20)(15+x) \\700 &= 10(15+x) \\70 &= 50+x \\20 &= x\end{aligned}$$

- 4) Find the lower base of a trapezoid whose upper base is 10 and median is 15.

$$\begin{aligned}M &= 1/2(b_1+b_2) \\15 &= 1/2(10+x) \\30 &= 10+x \\20 &= x\end{aligned}$$

- 5) A trapezoid has a perimeter of 50. The nonparallel sides are both 10. Find one of the trapezoid's bases if the other base is 10.

$$\begin{aligned}50 - (10)(2) &= 10+x \\50 - 20 &= 10+x \\30 &= 10+x \\20 &= x\end{aligned}$$