Lesson 6.5 Practice: Trapezoids and Kites

School Launch · Geometry · Unit 6: Quadrilaterals and Polygons · Worksheet A

Calculator allowed

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. A trapezoid has bases 10 and 24. Find the length of its midsegment. EASY

2. A trapezoid has bases 6 and 28. Find the length of its midsegment. EASY

3. A trapezoid has bases 16 and 27. Find the length of its midsegment. EASY

4. In kite $ABCD$, the non-vertex angles $\angle B$ and $\angle D$ are congruent. $m\angle A = 116°$ and $m\angle C = 56°$. Find $m\angle B$. MEDIUM

5. In kite $ABCD$, the non-vertex angles $\angle B$ and $\angle D$ are congruent. $m\angle A = 79°$ and $m\angle C = 79°$. Find $m\angle B$. MEDIUM

6. A trapezoid has bases 7 and 28. Find the length of its midsegment. MEDIUM

7. A trapezoid has bases 12 and 29. Find the length of its midsegment. MEDIUM

8. A trapezoid has bases 12 and 30. Find the length of its midsegment. HARD

9. A trapezoid has bases 6 and 37. Find the length of its midsegment. HARD

10. In kite $ABCD$, the non-vertex angles $\angle B$ and $\angle D$ are congruent. $m\angle A = 107°$ and $m\angle C = 137°$. Find $m\angle B$. HARD