

Name: _____ Class: _____ Date: _____

ID: A

5.3 Homework Kites and Trapezoids

True/False

Indicate whether the statement is true or false.

_____ The vertex angles of a kite are congruent.

_____ The diagonals of a kite bisect each other.

Multiple Choice

Identify the choice that best completes the statement or answers the question.

Choose whether each statement is always true, sometimes true, or never true.

_____ The diagonals of a trapezoid are congruent.
 Always true
 Sometimes true
 Never true

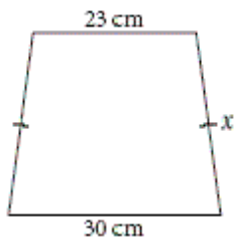
_____ The diagonals of a kite bisect each other.
 Always true
 Sometimes true
 Never true

Numeric Response

This figure is an isosceles trapezoid.

Perimeter = 105 cm

$x =$ _____ cm



Completion

Complete each statement.

The diagonals of a kite are _____.

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In an isosceles trapezoid, the base angles are _____.

The vertex angles of a kite are _____ by the diagonal.

The nonvertex angles of a kite are _____.

Name the most general polygon that fits each set of conditions.

A quadrilateral with two pairs of adjacent congruent angles and two pairs of adjacent non-congruent angles: _____

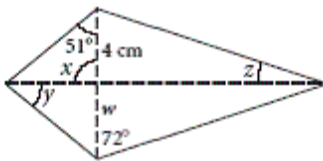
This figure is a kite.

$$x = \underline{\hspace{2cm}}^\circ$$

$$y = \underline{\hspace{2cm}}^\circ$$

$$z = \underline{\hspace{2cm}}^\circ$$

$$w = \underline{\hspace{2cm}} \text{ cm}$$

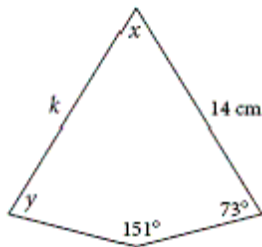


This figure is a kite.

$$x = \underline{\hspace{2cm}}^\circ$$

$$y = \underline{\hspace{2cm}}^\circ$$

$$k = \underline{\hspace{2cm}} \text{ cm}$$



This figure is an isosceles trapezoid.

$$x = \underline{\hspace{2cm}}^\circ$$

$$y = \underline{\hspace{2cm}}^\circ$$

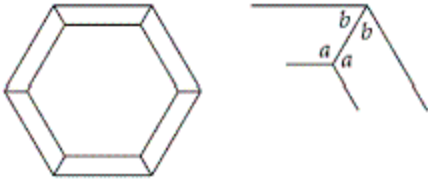


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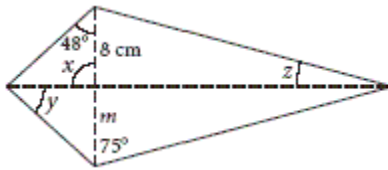
A regular hexagonal mirror frame is to be built from strips of 2-inch-wide pine lattice. At what angles a and b should the lattice be cut?

$a =$ _____^o
 $b =$ _____^o



This figure is a kite.

$x =$ _____^o
 $y =$ _____^o
 $z =$ _____^o
 $m =$ _____ cm



Perimeter = 64

$x =$ _____^o
 $y =$ _____^o
 $a =$ _____



5.3 Homework Kites and Trapezoids Answer Section

TRUE/FALSE

ANS: F PTS: 1 DIF: Easy REF: Lesson 5.3
OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
KEY: kite | vertex angle | congruent

ANS: F PTS: 1 DIF: Easy REF: Lesson 5.3
OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
KEY: kite | diagonal | bisect

MULTIPLE CHOICE

ANS: B PTS: 1 DIF: Easy REF: Lesson 5.3
OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
KEY: trapezoid | diagonal

ANS: C PTS: 1 DIF: Easy REF: Lesson 5.3
OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
KEY: kite | diagonal

NUMERIC RESPONSE

ANS: 26

PTS: 1 DIF: Moderate REF: Lesson 5.3
OBJ: Discover properties of kites and trapezoids NAT: G.CO.11
TOP: Kite and Trapezoid Properties KEY: isosceles trapezoid

COMPLETION

ANS: perpendicular

PTS: 1 DIF: Easy REF: Lesson 5.3
OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
KEY: kite | diagonals

ANS: congruent

PTS: 1 DIF: Easy REF: Lesson 5.3
OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
KEY: isosceles trapezoid | base angle

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ANS: bisected

PTS: 1 DIF: Easy REF: Lesson 5.3
 OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
 KEY: kite | diagonal
 ANS: congruent

PTS: 1 DIF: Easy REF: Lesson 5.3
 OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
 KEY: kite | nonvertex angles
 ANS: Isosceles trapezoid

PTS: 1 DIF: Moderate REF: Lesson 5.3
 OBJ: Discover properties of kites and trapezoids NAT: G.CO.11
 TOP: Kite and Trapezoid Properties KEY: parallelogram | diagonals | properties | bisect
 ANS: 90, 39, 18, 4

PTS: 1 DIF: Moderate REF: Lesson 5.3
 OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
 KEY: kite
 ANS: 63, 73, 14

PTS: 1 DIF: Moderate REF: Lesson 5.3
 OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
 KEY: kite
 ANS: 59, 121

PTS: 1 DIF: Moderate REF: Lesson 5.3
 OBJ: Discover properties of kites and trapezoids NAT: G.CO.11
 TOP: Kite and Trapezoid Properties KEY: isosceles trapezoid
 ANS: 120, 60

PTS: 1 DIF: Moderate REF: Lesson 5.3
 OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
 KEY: trapezoid
 ANS: 90, 42, 15, 8

PTS: 1 DIF: Moderate REF: Lesson 5.3
 OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
 KEY: kite
 ANS: 96, 144, 22

PTS: 1 DIF: Moderate REF: Lesson 5.3
 OBJ: Discover properties of kites and trapezoids TOP: Kite and Trapezoid Properties
 KEY: kite