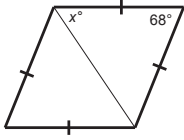
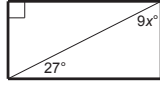


Find the value of x in the figure.



1

Error Analysis: Find the error below in solving for x in the rectangle.



$$9x^\circ = 27^\circ$$

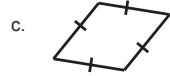
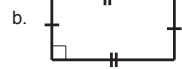
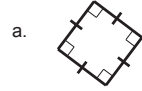
$$x = 3^\circ$$

2

$EFGH$ is a rectangle. If $EG = 7x - 4$ and $FH = 4x + 8$, what is the value of x ? What is the length of each diagonal?

9

Determine whether the parallelogram is a *rhombus*, a *rectangle*, or a *square*. Explain.



10

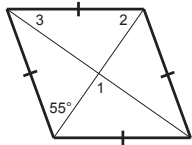
Give the most precise description of the figure.



- (A) quadrilateral
- (B) rectangle
- (C) square
- (D) rhombus

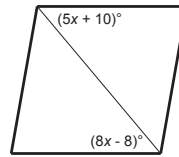
3

Find $m\angle 1$, $m\angle 2$, and $m\angle 3$.



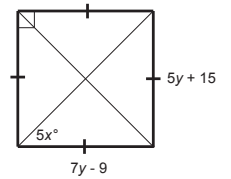
4

What is the value of x in the rhombus?



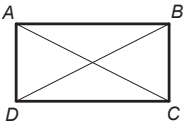
11

Find the value of each variable in the figure.



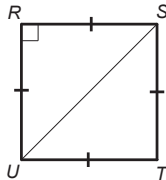
12

Find the length of \overline{AC} in the rectangle if $AC = 6x + 3$ and $BD = 4x + 19$.



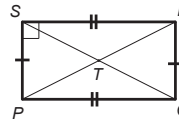
5

Find $m\angle USR$ in the figure.



6

Find the length of each segment if $SQ = 28$.



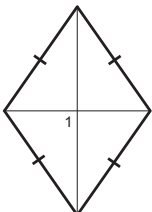
- a. $ST = ?$
- b. $RP = ?$
- c. $PT = ?$
- d. $QT = ?$

13

$ABCD$ is a rhombus. If $AB = 4x + 3$ and $BC = 9x - 27$, what is the value of x ?

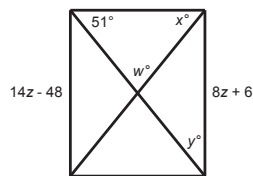
14

Find the value of x if $m\angle 1 = 4x + 2$.



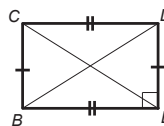
7

Find the value of each variable in the rectangle.



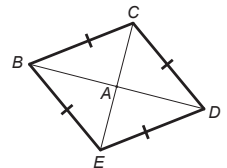
8

If $m\angle BCE = 4x + 10$ and $m\angle DCE = 2x + 8$, find $m\angle DCE$.



15

Find the measure of each angle if $m\angle CBE = 72^\circ$.



- a. $m\angle EBD = ?$
- b. $m\angle BAE = ?$
- c. $m\angle BCD = ?$
- d. $m\angle CED = ?$

16

I. A square is a rectangle.

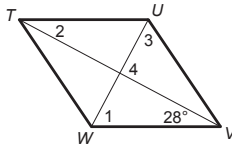
- a. sometimes
- b. always
- c. never

II. A rectangle is a square.

- a. sometimes
- b. always
- c. never

17

$TUVW$ is a rhombus. Find the measure of the numbered angles.

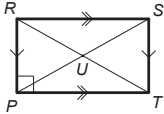


18

Find the value of x .

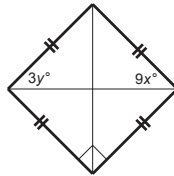
$$US = 3x + 4,$$

$$RT = 7x - 3$$



19

Find the value of each variable.



20

11.	$x = 6^\circ$	12.	$x = 9^\circ$ $y = 12$
13.	$ST = 14$ $RP = 28$ $PT = 14$ $QT = 14$	14.	$x = 6$
15.	$x = 12^\circ$ $m\angle DCE = 32^\circ$	16.	a. $m\angle EBD = 36^\circ$ b. $m\angle BAE = 90^\circ$ c. $m\angle BCD = 108^\circ$ d. $m\angle CED = 54^\circ$
17.	I. b. always II. a. sometimes	18.	$m\angle 1 = 62^\circ$ $m\angle 2 = 28^\circ$ $m\angle 3 = 62^\circ$ $m\angle 4 = 90^\circ$
19.	$x = 11$	20.	$x = 5^\circ$ $y = 15^\circ$

Key

Special Parallelograms Task Cards

1.	$x = 56^\circ$	2.	$9x^\circ + 27^\circ = 90^\circ$ $x = 7^\circ$ both angles are complementary
3.	B - rectangle (4 right angles)	4.	$m\angle 1 = 90^\circ$ $m\angle 2 = 55^\circ$ $m\angle 3 = 35^\circ$
5.	$x = 8$ $AC = 51$	6.	$m\angle USR = 45^\circ$
7.	$x = 22^\circ$	8.	$x = 51^\circ$ $w = 78^\circ$ $y = 39^\circ$ $z = 9$
9.	$x = 4, EG = 24, FH = 24$	10.	a. square b. rectangle c. rhombus