

You may start with any of the cards below.

Write the card number on your IC46 sheet

Copy the problem and then solve

The answer to the card that you solved will be at the top of a different sheet. For example, if you start at card #1 and find the answer is 13, the next card that you would do would be card #4.

Do that problem next.

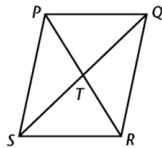
All the problems will loop back around to the beginning.

Answer: 7

PQRS is a rhombus. Solve for the variable requested.

Given:  $\angle PTQ = 2x + 10$ ,  $\angle QPS = 4x - 50$

Find:  $\angle QPT$ .



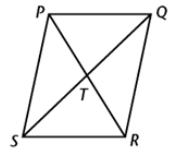
1

Answer: 256

PQRS is a rhombus. Solve for the variable requested.

Given:  $PQ = 4y - 7$ ,  $PS = y + 8$

Find: The length of  $\overline{QR}$ .



2

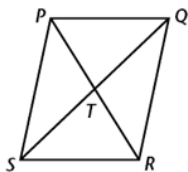
Answer: 55

PQRS is a rectangle. Solve for the variable requested.

Given:  $QT = 20$ ,  $TS = 3x + y$ ,  $TR = 4x - 2y$

Find:  $x$  &  $y$ .

(You will only find the answer for  $x$  on the next problem, though.)



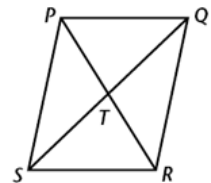
3

Answer: 13

PQRS is a rectangle. Solve for the variable requested.

Given:  $QS = 3x + 7$ ,  $PR = 5x + 9$ ,  $PQ = x + 3$ ,

Find:  $PT$



4

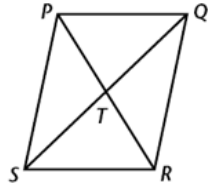
Answer: 6

PQRS is a rhombus. Solve for the variable requested.

Given:  $\overline{PQ} = x^2 + 5$ ,  $m\angle PTQ = (y^2 + 9)^\circ$ ,  $SR = 54$

Find:  $x$  &  $y$ .

(You will only find the answer for  $y$  on the next problem, though.)



5

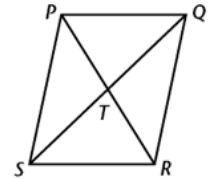
Answer: 2

PQRS is a parallelogram. Solve for the variable requested.

Given:  $m\angle PQR = (5y)^\circ$ ,  $m\angle QRT = 70^\circ$ ,  
 $m\angle TRS = 45^\circ$ ,  $m\angle RSP = (7x - 5)^\circ$

Find:  $x$  &  $y$ .

(You will only find the answer for  $x$  on the next problem, though.)



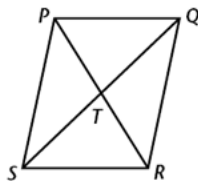
6

Answer:  $\pm 9$

PQRS is a square. Solve for the variable requested.

Given:  $\overline{ST} = 4x^2 + 5$ ,  $\overline{TQ} = 41$ ,  $PQ = 6x + 5$

Find:  $QR$ .



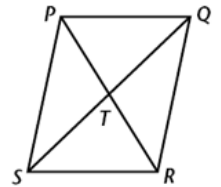
7

Answer: 10

PQRS is a square. Solve for the variable requested.

Given:  $\overline{PT} = 4y$ ,  $\overline{TR} = 16$ ,  $m\angle TRS = 9x$

Find:  $x$  &  $y$  (You will only find the answer for  $x$  on the next problem, though.)



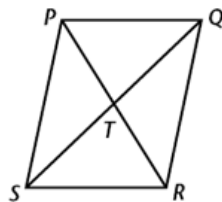
8

Answer: 23

PQRS is a rectangle. Solve for the variable requested.

Given:  $\overline{PT} = 9x + 20$ ,  $\overline{TS} = 10x + 8$

Find:  $PR$ .



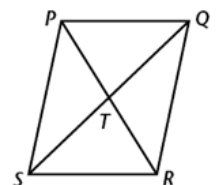
9

Answer: 5

PQRS is a rhombus. Solve for the variable requested.

Given:  $m\angle PSQ = 25^\circ$ ,  $m\angle QSR = (3x + y)^\circ$ ,  
 $m\angle PRQ = (x + 7y + 10)^\circ$ ,  $m\angle PRS = 65^\circ$

Find:  $x$  &  $y$  (You will only find the answer for  $y$  on the next problem, though.)



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