

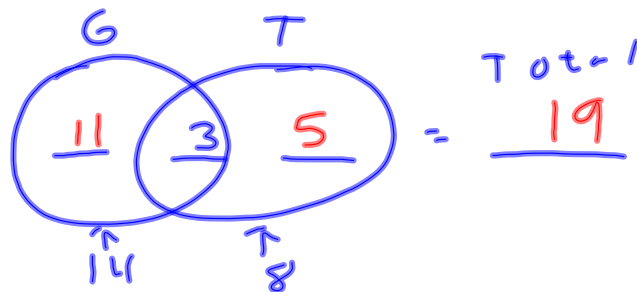
“If you have a <sup>p</sup>laptop, then you have a <sup>q</sup>computer”  
is represented by  $p \rightarrow q$ .

What is the symbolic representation  
of “If you have a computer, then you  
don’t have a laptop”?

$$q \rightarrow \sim p$$

If  $AB + NP = BC + NP$ , then  $AB = BC$  demonstrates what property?  
~~NP~~     ~~NP~~     Addition

In my class, everyone plays either golf or tennis.  
14 play golf and 8 play tennis.  
If 3 play both tennis and golf,  
how many kids are in my class?



What is the midpoint of a line that has endpoints at (-2, -3) and (8, -1)?

$$\begin{array}{l} (-2, -3) \\ (8, -1) \end{array} \quad \left( \frac{-2+8}{2}, \frac{-3+(-1)}{2} \right)$$
$$(3, -2)$$

What is the area of a circle with a radius of 6 cm?

$$\begin{aligned} A &= \pi r^2 \\ &= \pi \cdot 6^2 \\ &36\pi \approx 113.1 \text{ cm}^2 \end{aligned}$$

The contrapositive of "if you have a dog, you like cats" is "if you don't like cats, you love dogs."

*don't have*

Give the equation in slope intercept form that goes through (2, 4) and is parallel to the line  $y = 5x - 3$ .

$$\begin{aligned} & \text{parallel to the line } y = 5x - 3 \\ & m = 5 \\ & y - y_1 = m(x - x_1) \\ & y - 4 = 5(x - 2) \\ & y - 4 = 5x - 10 \\ & \begin{array}{r} y - 4 = 5x - 10 \\ +4 \qquad \qquad +4 \\ \hline y = 5x - 6 \end{array} \end{aligned}$$

Two sides of a triangle are 4 cm and 10 cm.

What is a possible measurement of the third side?

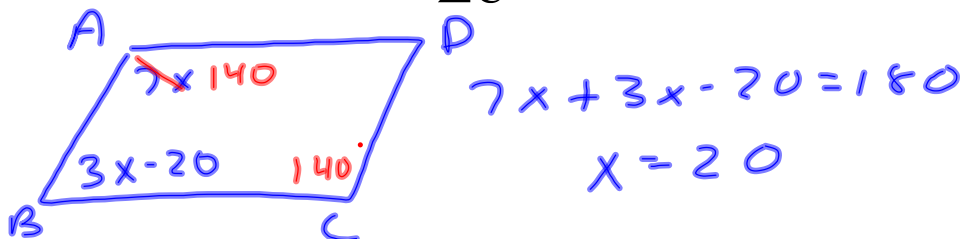
- A. 8 cm
- B. 2 cm
- C. 15 cm
- D. 14 cm

$$4, 10 \quad 6 < m < 14$$

If ABCD is a parallelogram with

$$\angle A = 7x \text{ and } \angle B = 3x - 20,$$

what is the measurement of  $\angle C$  ?



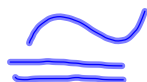
Opposite angles are not always congruent in a

Diagonals are always perpendicular in a

What is the distance from (1, 5) to (7, 6)?

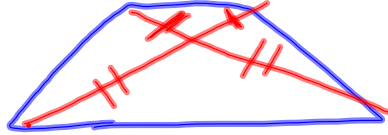
$$D = \sqrt{\Delta x^2 + \Delta y^2}$$
$$= \sqrt{6^2 + 1^2} = \sqrt{37} \approx 6.1$$

If  $\triangle BCD$  is congruent to  $\triangle PQR$ , then  $\overline{DE}$  is congruent to  $\underline{QR}$



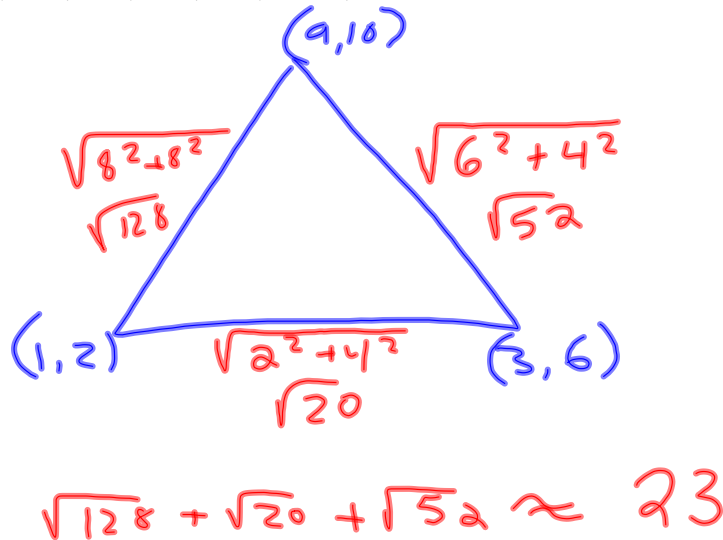
Which of the following quadrilaterals could have diagonals that are congruent but do not bisect each other?

- A. rhombus
- B. rectangle
- C. trapezoid
- D. parallelogram



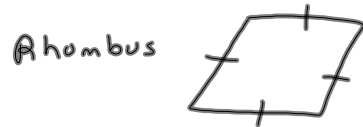
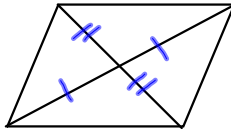
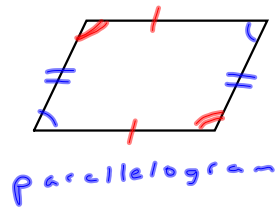
What is the perimeter of a triangle with the following vertices:

(1, 2) (3, 6) (9, 10)

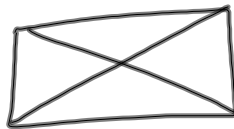
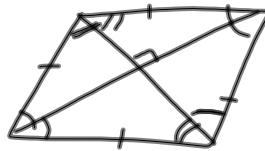


Let A = (7, 8), B = (9, 13), and C = (10, 14). How far is it to go from A to B and then to C?

Same idea



- ① Diagonals are  $\perp$  to each other
- ② Diagonals bisect the angles



Rectangle  
Diagonals are same length

$a \wedge b \rightarrow$  and

$a \vee b \rightarrow$  or

$\leftrightarrow$  if and only if

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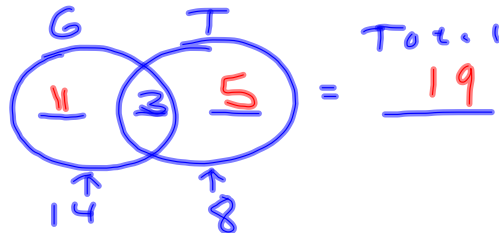
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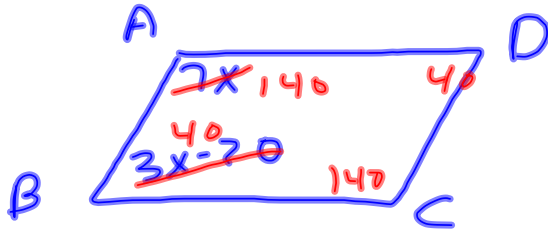
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$$7x + 3x - 20 = 180$$

$$x = 20$$



Opposite angles are not always congruent in a *trapezoid*

Diagonals are always perpendicular in a *rhombus*

What is the distance from (1, 5) to (7, 6)?

$$\begin{aligned} D &= \sqrt{\Delta x^2 + \Delta y^2} \\ &= \sqrt{6^2 + 1^2} \\ &= \sqrt{37} \approx 6.1 \end{aligned}$$

If BCDE is congruent to OPQR, then



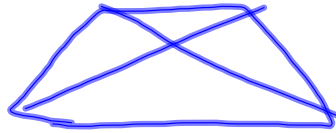
$\overline{DE}$  is congruent to





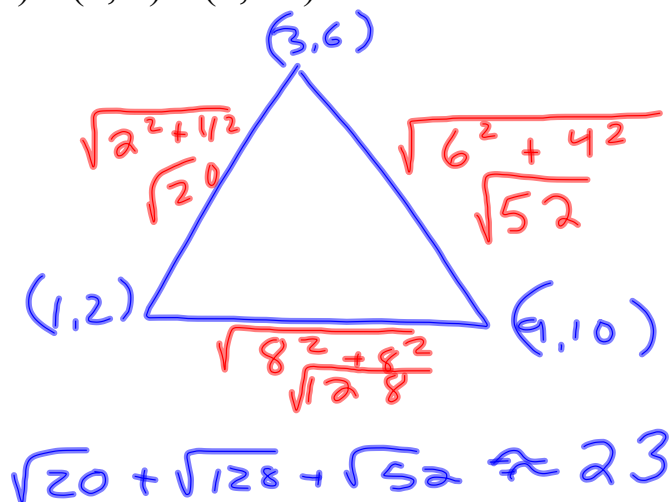
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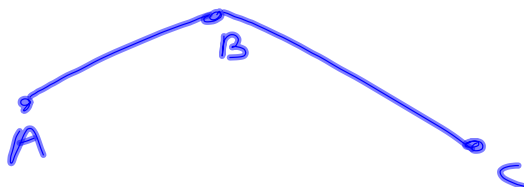


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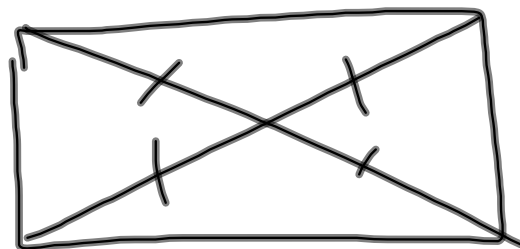
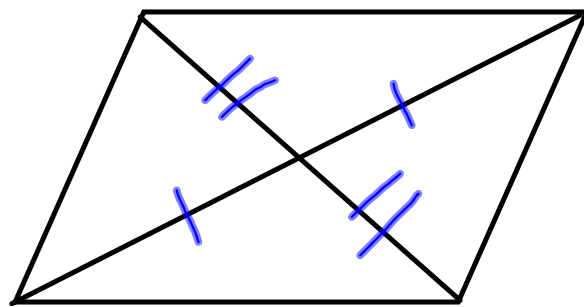
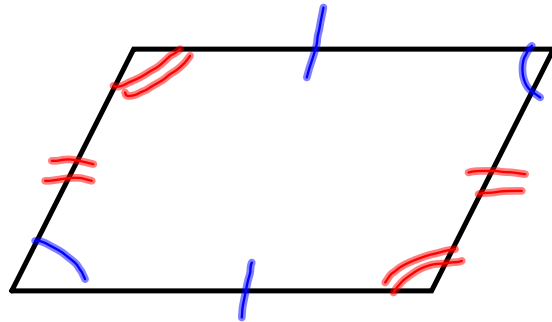
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Parallelogram



Rectangle - diagonals are =