Warm↑:

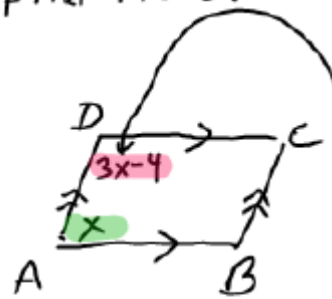
Given: $\overline{GM} \parallel \overline{RA}$
$\angle MGR \cong \angle RAM$

Prove: $\overline{GR} \parallel \overline{MA}$

Statement	Reason
① $\overline{GM} \parallel \overline{RA}$, $\angle MGR \cong \angle RAM$	① Given
• ② $\angle MGA \cong \angle RAG$	② $\parallel$ lines $\Rightarrow$ alt. int. $\angle$s $\cong$
•• ③ $\angle MAG \cong \angle RGA$	③ Subtraction Property
④ $\overline{GR} \parallel \overline{MA}$	④ Alt. int $\angle$'s $\cong \Rightarrow \parallel$ lines

Given: ▱ ABCD (means ||-gram)
$\angle D = (3x-4)^\circ$
$\angle A = x^\circ$

Find m$\angle C$. $\overline{DC} \parallel \overline{AB} \Rightarrow$ SSI $\angle$s supp.



$\therefore \angle A + \angle D = 180^\circ$
$x + 3x - 4 = 180$
$4x - 4 = 180$
$4x = 184$
$x = 46$

$\boxed{\angle A = 46^\circ, \angle D = 134^\circ}$

But $\overline{AD} \parallel \overline{BC}$ also means $\angle D + \angle C = 180$.

$\therefore \angle D + \angle C = 180 \Rightarrow 134 + \angle C = 180$
$-134 \quad -134$
$\angle C = 46$

December 9 2013.pdf - Adobe Reader

DATE: 12/9

Use this page to write definitions.

Quadrilateral Family Tree: Definitions

A 4 sided convex polygon.
"many"

Quadrilateral

2 pairs of ∥ sides

0 ∥ sides

1 pair ∥ sides

- A quadrilateral with two pairs of ∥ sides

Parallelogram

- A quadrilateral with two disjoint pairs of consecutive sides ≅.

Kite

- A quad with exactly one pair of ∥ sides (∥ sides called bases)

Trapezoid

December 9 2013.pdf - Adobe Reader

File Edit View Window Help

3 / 5 75% Tools Sign Comment

File Home Insert Page Layout References Mailings Review View MathType

Paste Clipboard Arial 12 Font Paragraph Emphasis Heading 1 Normal Strong Styles Change Styles Find Replace Select Editing

- A parallelogram with at least one right ∡.

Rectangle

- A ll-gram with at least two consecutive sides ≅.

Rhombus

- A trapezoid with non-parallel sides (called legs) ≅.

Isosceles Trapezoid

- A parallelogram that is both a rectangle and rhombus.

Square

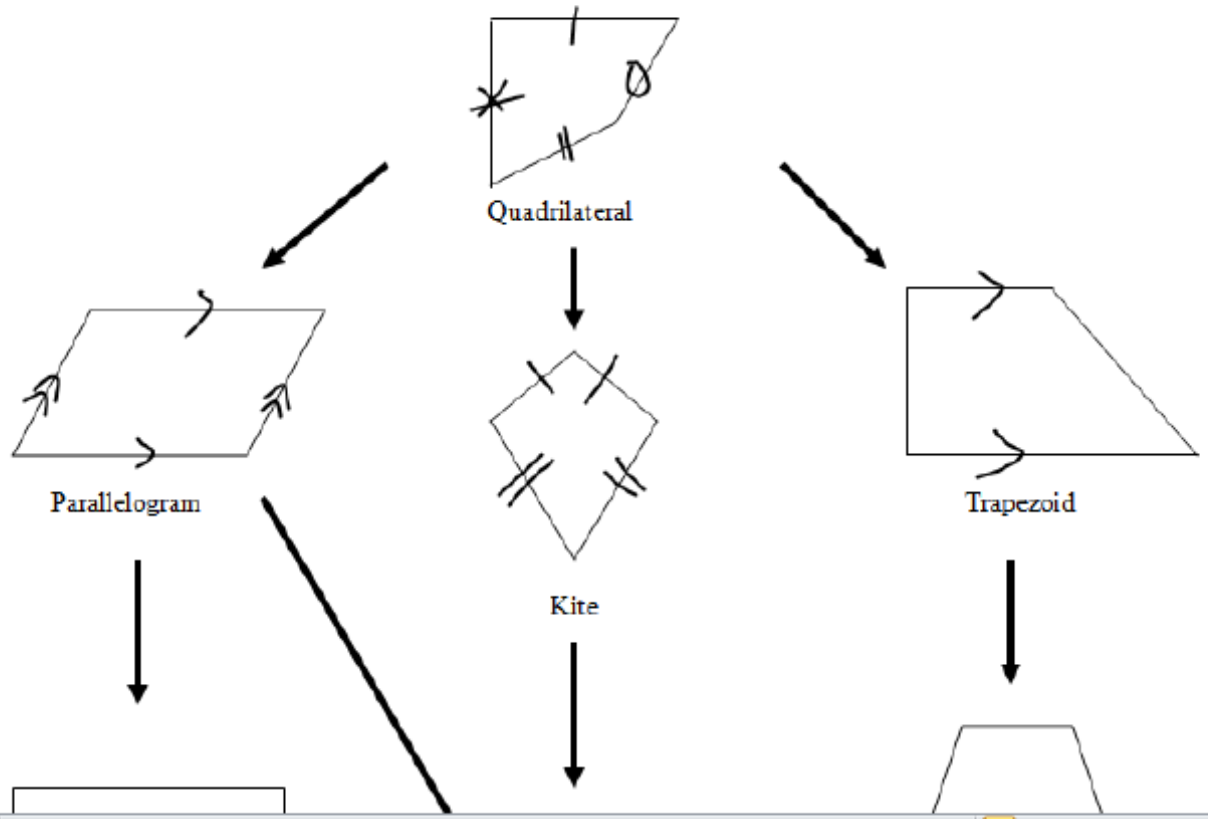
Page: 1 of 2 Words: 31 100%

11.69 x 8.27 in

December 9 2013.pdf - Adobe Reader

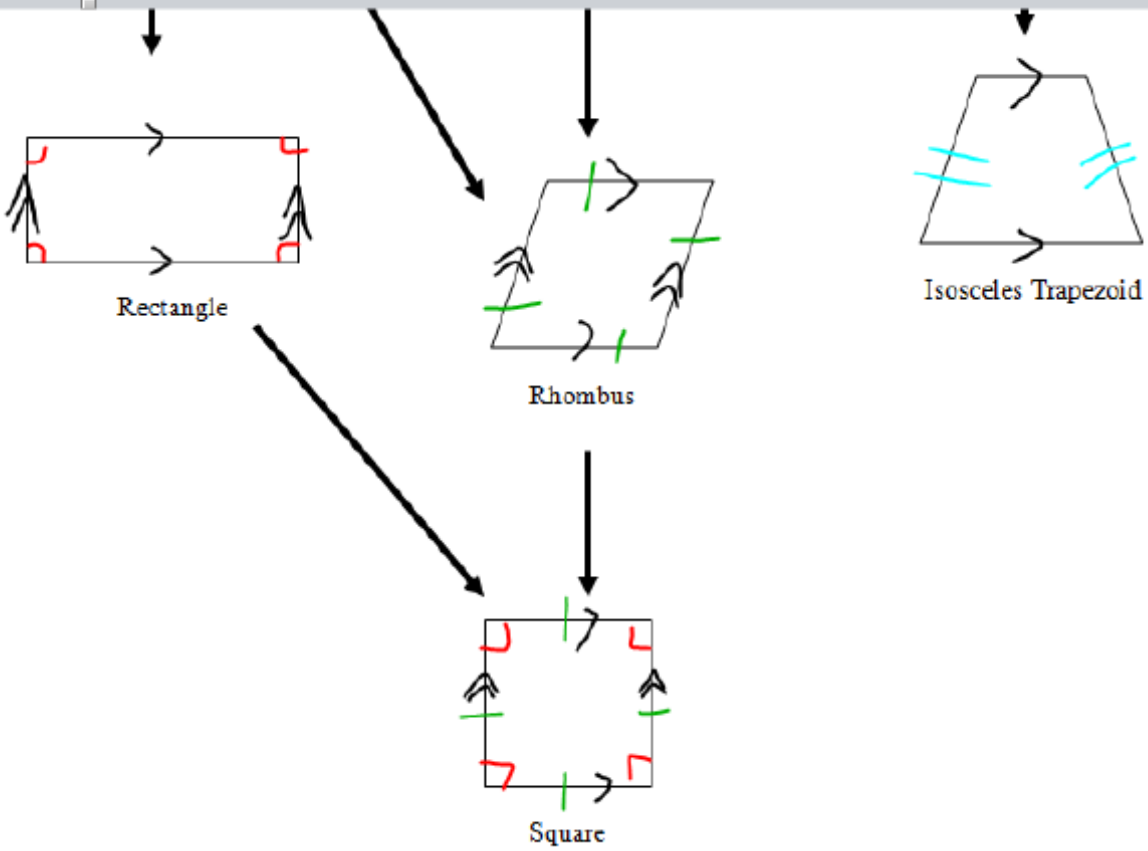
Use this page to make **tick marks** based on the definitions.

Quadrilateral Family Tree



December 9 2013.pdf - Adobe Reader

5A Quadrilateral Flowchart [Compatibility Mode] - Microsoft Word



11.69 x 8.27 in