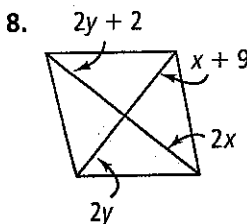
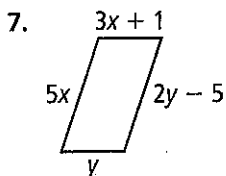
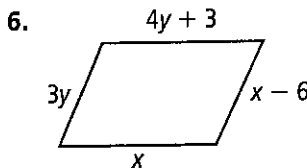
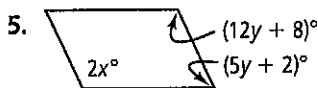
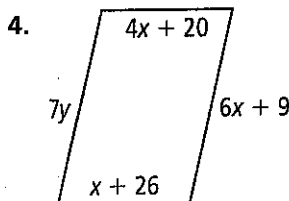
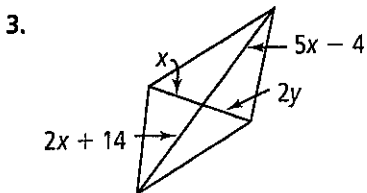
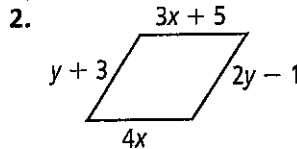
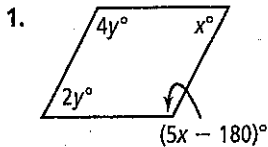


# 5.3 Practice

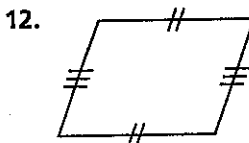
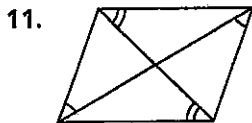
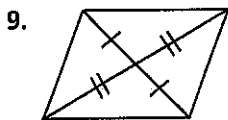
Form G

## Proving That a Quadrilateral Is a Parallelogram

**Algebra** For what values of  $x$  and  $y$  must each figure be a parallelogram?



Can you prove that the quadrilateral is a parallelogram based on the given information? Explain.



### #1-8 Answers Scrambled

64	60	10	10	6	2	3	4
11	3	15	5	30	10	3	3

#9-12 Answers in order, check with Ms. Walczak for reasoning

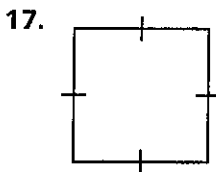
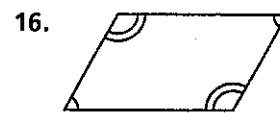
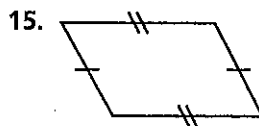
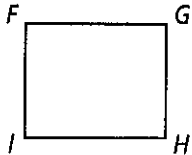
9) Yes	10) No	11) Yes	12) Yes
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#14-19 Answers in order, check with Ms. Walczak for reasoning and #20

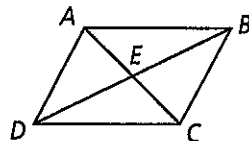
14) Yes	15) Yes	16) Yes	17) Yes	18) Yes	19) Yes
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Can you prove that the quadrilateral is a parallelogram based on the given information? Explain.

14.  $\overline{FG} \parallel \overline{IH}$ ,  $\overline{FI} \parallel \overline{GH}$



18.  $\overline{AE} \cong \overline{EC}$ ,  $\overline{BE} \cong \overline{ED}$



20. **Error Analysis** It is given that  $\overline{MO} \cong \overline{TR}$  and  $\overline{NP} \cong \overline{QS}$ , where  $MNOP$  and  $TQRS$  are parallelograms. A student has said that if those statements are true, then  $MNOP \cong TQRS$ . Why is this student incorrect?