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| Ways to PROVE a quadrilateral is a Parallelogram |
| Sides | Definition of Parallelogram: If both pairs of opposite sides of a quadrilateral are parallel, then it is a parallelogram.  | http://www.mathplanet.com/Oldsite/media/44000/parallelogram_499x300.jpg |
| If the 2 pairs of opposite sides of a quadrilateral are congruent, then it is a parallelogram. | http://www.mathplanet.com/Oldsite/media/44000/parallelogram_499x300.jpg |
| If ONE pair of opposite sides of a quadrilateral is BOTH parallel and congruent, then it is a parallelogram. | http://www.mathplanet.com/Oldsite/media/44000/parallelogram_499x300.jpg |
| Angles | If the 2 pairs of opposite angles in a quadrilateral are congruent, then it is a parallelogram. | http://www.mathplanet.com/Oldsite/media/44000/parallelogram_499x300.jpg |
| Diagonals | If the diagonals of a quadrilateral bisect each other, then it is a parallelogram. | http://www.mathplanet.com/Oldsite/media/44000/parallelogram_499x300.jpg |

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Complete the following proofs:



2. Given: DC // AB and ∠1 ≅ ∠2

 Prove: ABCD is a parallelogram



**DAY 3 HOMEWORK**

Find the value for x that will ensure that the given quadrilateral will be a parallelogram:

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Complete the following proof:



$\overbar{ED}$ // $\overbar{BF}$