Geometry Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Worksheet 6.3 Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per: \_\_\_\_\_\_\_\_\_\_

Directions: Are you given enough information to determine whether the quadrilateral is a parallelogram? Explain.

1) 2) 3)

YES YES YES

4) 5) 6)

60°

120°

12

12

60°

NO YES YES

Directions: Decide whether each piece of given information alone is sufficient to prove that quadrilateral *ABCD* is a parallelogram. Explain.

A

D

C

B

E

7) E is the midpoint of  and  8) m∠ABC and m∠BCD = 180°

YES NO

9)  and  10) ∠ABC ≅ ∠ADC, and ∠BAD ≅ ∠BCD

NO YES

11)  and  12)  and 

YES YES

13)  and  14) m∠BAD = 110° and m∠BCD = 110°

NO NO

Directions: Determine what additional information is needed in order to prove that quadrilateral *ABCE* is a parallelogram.

A

B

C

D

E

15)  16) ∠DCA ≅ ∠BAC

∠DAC ≅ ∠BCA

17) m∠CDA + m∠DAB = 180° 18) 

m∠DAB + m∠ABC = 180°

m∠ABC + m∠BCD = 180°

m∠BCD + m∠CDA = 180°

19) 

Directions: Decide whether the quadrilateral is a parallelogram. Explain.

20) 21) 22) 24)

YES NO NO YES

24) 25) 26) 27)

YES NO YES NO