DO NOW

GEOMETRY · 5 MINUTES · START RIGHT AWAY

Lesson 6-4b **Explore Angle Measures to Confirm a Parallelogram**

Name _____ Date _____ Per _____

1 FLUENCY

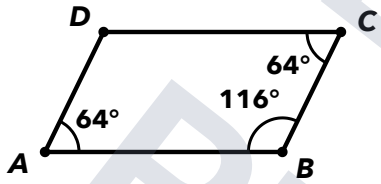
Angles are listed in order around each quadrilateral. Must it be a parallelogram?

(1) 75°, 105°, 75°, 105° **Yes** or **No**

(2) 75°, 105°, 105°, 75° **Yes** or **No**

2 VISUAL MODEL

Three angles of quadrilateral ABCD are shown. Find m∠D. Is ABCD a parallelogram?



m∠D = ☐

parallelogram? **Yes** or **No**

3 APPLICATION

The angles of a mosaic tile, in order, are $3x°$, $(x + 40)°$, $3x°$, and $(x + 40)°$. Find the angle measures. Is the tile a parallelogram?

x = ☐ angles ☐ and ☐ **Yes** or **No**

WORK

4 REASONING

In quadrilateral ABCD, m∠A + m∠B = 180°. Which reason shows that AD is parallel to BC?

A Conv. of Same-Side Int. ∠s Thm.

B Vertical Angles Thm.

C Alt. Exterior Angles Thm.

D Triangle Angle-Sum Thm.

*We don't divide our effort, we **multiply** it!*

✎ Show your work ✓ Check your work ★ Try your best

Preview - the full worksheet and its answer key are at primeworksheet.com