



5-6 Solve It!




Think about whether the shape of the triangle would be easy to play in.




SOLVE IT!

Getting Ready!



For a neighborhood improvement project, you volunteer to help build a new sandbox at the town playground. You have two boards that will make up two sides of the triangular sandbox. One is 5 ft long and the other is 8 ft long. Boards come in the lengths shown. Which boards can you use for the third side of the sandbox? Explain.



15 ft

12 ft

8 ft

8 ft

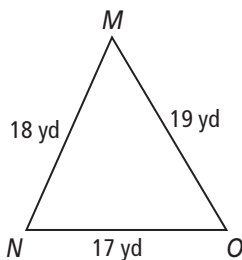
5 ft

5 ft

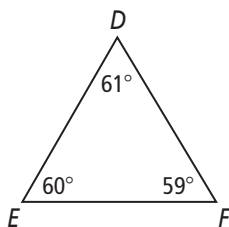
2 ft

5-6 Lesson Quiz

1. Which is the smallest angle in $\triangle MNO$?



2. Order the sides of $\triangle DEF$ from shortest to longest.



3. **Do you UNDERSTAND?** Two sides of a triangle are 5 inches and 10 inches. What is the range of possible lengths for the third side?

Answers

Solve It!

5-ft, 8-ft, or 12-ft; the 2-ft board is too short to form a \triangle with the 5-ft board and the 8-ft board, and the 15-ft board is too long.

Lesson Quiz

1. M
2. \overline{DE} , \overline{DF} , \overline{EF}
3. $5 < x < 15$