

The Triangle Inequalities - WorkSheet

Name:

Class:

Q1: Which of the following sets of side lengths cannot form a triangle?

- A) 5 cm, 7 cm, 10 cm
- B) 3 cm, 4 cm, 5 cm
- C) 2 cm, 8 cm, 11 cm
- D) 6 cm, 6 cm, 6 cm

Q2: Finding the Range of the Third Side

If a triangle has two sides measuring 9 inches and 13 inches, what is the possible range for the length of the third side (x)?

- A) $4 < x < 22$
- B) $9 < x < 13$
- C) $x > 22$
- D) $x < 4$

Q4: Least Whole-Number Distance

A triangle has two sides with lengths of 10 cm and 15 cm. What is the **least possible whole-number** length for the third side?

- A) 5 cm
- B) 6 cm
- C) 24 cm
- D) 25 cm