Name_____
Date _____ Pd _____

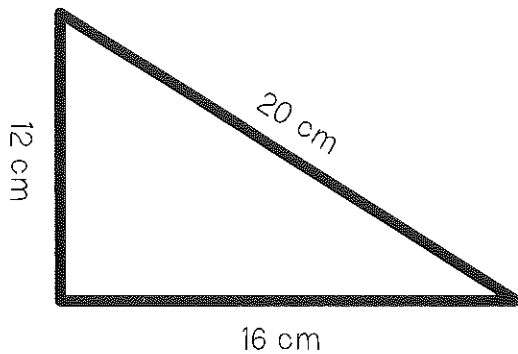# CONDITIONS OF A TRIANGLE "HE SAID, SHE SAID"

Each of the 10 cards will have statements from two students. Read carefully and choose the name of the student who made the correct statement. Then, justify your answer in the space provided.

① _____ is correct because⋯

② _____ is correct because⋯

③ _____ is correct because⋯

④ _____ is correct because⋯

⑤ _____ is correct because⋯

⑥ _____ is correct because⋯

⑦ _____ is correct because⋯

⑧ _____ is correct because⋯

⑨ _____ is correct because⋯

❶⓪ _____ is correct because⋯

CARD 1:

Three different lengths are used to form a triangle.

12 cm

20 cm

16 cm

Anthony says that the triangle formed is unique.

Annie says that more than one triangle can be formed.

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CARD 2:

A triangular garden is being formed by bricks. The three sides measure 4 feet, 10 feet, and 3 feet in length. Will these measurements result in a triangle?
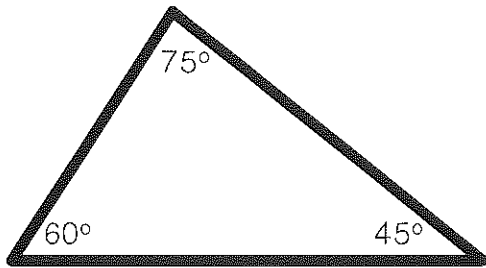
Benjamin says that these measurements will form a unique triangle.

Beatrice says that a triangle will not be formed by these measurements.

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CARD 3:

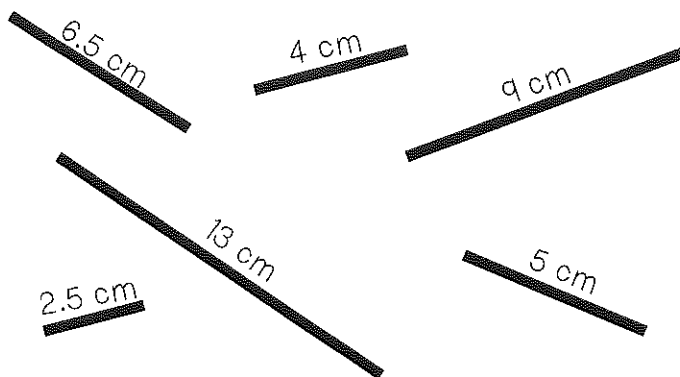Three different angle measures are used to form a triangle.

Carlos says that the angle measures will create one unique triangle.

Catherine says that the angle measures will create more than one triangle.

CARD 4:

Six different wooden dowel rods are scattered on a workbench. Which three will create a unique triangle?

Dylan says that the 2.5 cm, 4 cm, and 6.5 cm dowel rods will form a unique triangle.

Danielle says that the 4 cm, 6.5 cm, and 9 cm dowel rods will form a unique triangle.

CARD 5:

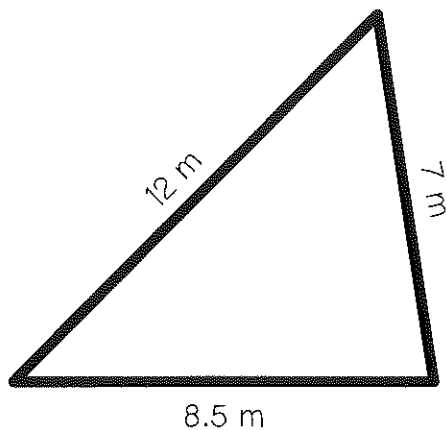Two sides of a triangle have lengths of 6 inches and 10 inches. What are the possible lengths of the third side?

Eric says that the side length could be between 4 inches and 16 inches.

Erin says that the side length could be between 4 and 10 inches.

CARD 6:

Three different lengths are used to form a triangle.

12 m

7 m

8.5 m

Fernando says that more than one triangle can be formed.

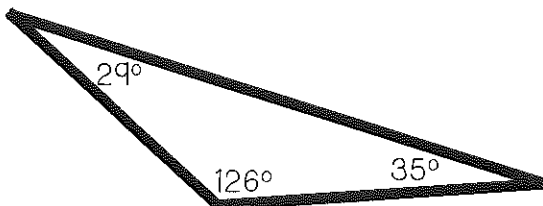Felicia says that the triangle formed is unique.

CARD 7:

A triangular fence is being formed by wood planks. The three planks measure 9 feet, 14 feet, and 6 feet in length. Will these measurements result in a triangle?

Gary says that a unique triangle will be formed by these measurements.

Gloria says that more than one triangle will be formed by these measurements.

CARD 8:

Three different angle measures are used to form a triangle.
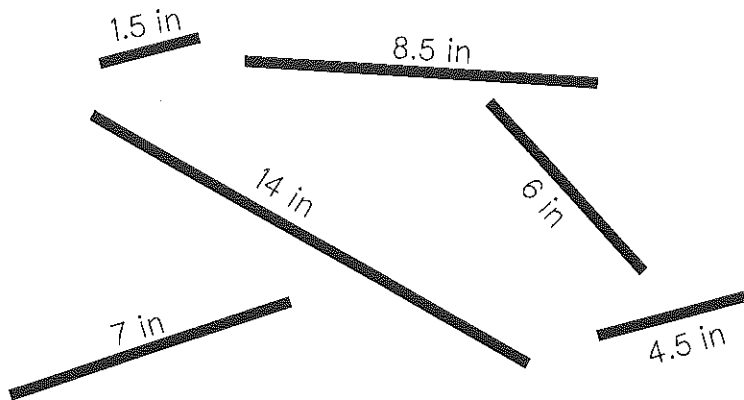
29°

126°   35°

Hunter says that the angle measures do not create a triangle.

Hazel says that the angle measures will create more than one triangle.

CARD 9:

Spaghetti noodles are scattered on the kitchen table. Which three will create a unique triangle?

1.5 in

8.5 in

14 in

6 in

7 in

4.5 in

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Irving says that the 14 in, 4.5 in, and 8.5 in spaghetti noodles will form a unique triangle.

Isabella says that the 8.5 in, 7 in, and 4.5 in spaghetti noodles will form a unique triangle.

CARD 10:

Two sides of a triangle have lengths of 14 meters and 17 meters. What are the possible lengths of the third side?

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Justin says that the side length could be between 3 and 31 inches.

Jasmine says that the side length could be between 3 and 17 inches.