Speak Agent™

MATH 8

When you buy a TV or computer, the "screen size" on the box measures the diagonal line (C) from corner to corner.
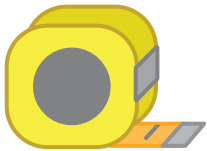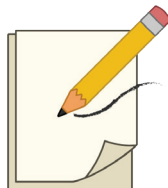
You can use Pythagoras' theorem to see what your TV's real "screen size" is.
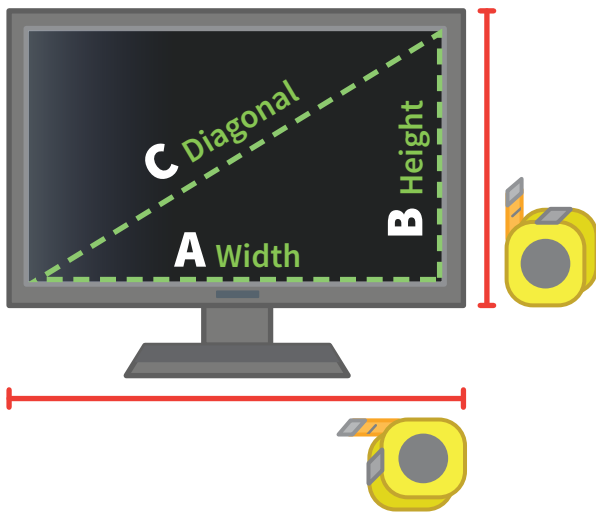
TOOLS YOU NEED

Calculator

Measuring Tape

Paper & Pencil

C Diagonal

B Height

A Width

1 MEASURE THE SIDES

▶ Measure your screen's width (A) and height (B).

C Diagonal
B Height
A Width

2 CALCULATE

▶ Use the formula:

$$A^2 + B^2 = C^2$$
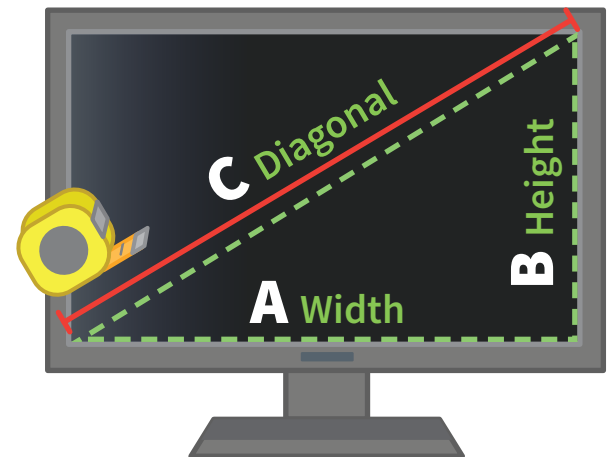
2×4

▶ Plug in your measurements of A and B.

🚩 Don't forget to square them before adding!

🚩 Don't forget to take the square root of C2.

3 CHECK YOUR ANSWER

▶ **Measure the diagnol (C) length.**

C Diagonal
B Height
A Width

▶ Does your measurement equal the value you calculated for C?

If not, that's okay! Just check your work and try again until you get it.

LEARNING GOALS

☐ Use Pythagoras' Theorem to find unknown side lengths in right triangles.

UNIT: Pythagorean Theorem and Angles

BONUS QUESTIONS

DISCUSSION

Do you feel it's misleading to use the diagonal length (C) to measure screen sizes?

Why or why not?

Why don't the people who market TVs and computers use width (A) for the screen size?