



If A is the incenter of $\triangle CDE$, find CA.

ANSWER

BACK

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If P is the circumcenter of $\triangle ABC$, find BC.

ANSWER

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Centers of TRIANGLES

PUMPKIN SMASH BINGO



CENTERS OF TRIANGLES

Pumpkin Smash Bingo!

Objective: Students will practice using the properties of centers of triangles (circumcenter, incenter, and centroid) to find side lengths and angle measures with this "Pumpkin Smash" PowerPoint Bingo Game. There are 30 total problems included in this game. **The Pythagorean Theorem is required for several problems.**

Directions:

- 1) Distribute a student recording worksheet and bingo board to each student. There are 30 boards included; if you have more than 30 students, simply repeat a board.
- 2) Open the PowerPoint game to run. Click on any pumpkin (or let the students throw a Koosh ball to pick a pumpkin). Students solve the problem at their desk on their recording worksheet. You can also choose to work through the problems with the students as they come up, or choose a student to work the problem at the board while the other students work at their desk.
- 3) Click "Answer" to display the answer. Students look for this answer on their bingo board and cross it off. With 30 questions and 25 spaces on the bingo board, not every student will have the answer on their board each time. Click back to return to the pumpkin screen and repeat until there is a winner.

There are only 20 problems on the worksheet because there is almost always a winner by this point. If you need to keep going, they can continue their work on a separate sheet of notebook paper. I play until there are multiple winners.

A student wins if they get 5 in a row, column, or diagonal. I typically awarded lollipops 😊.

The image displays several components of the game:

- Problem Card 1:** "If P is the circumcenter of $\triangle ABC$, find BC." Includes a diagram of a triangle with a circumcenter P and a side length of 14.
- Problem Card 2:** "If A is the incenter of $\triangle CDE$, find CA." Includes a diagram of a triangle with an incenter A and a side length of 7.
- Problem Card 12:** "If I is the centroid of $\triangle CEG$ and $CF = 75$, find CI." Includes a diagram of a triangle with a centroid I and a median CF.
- Bingo Board:** A 5x5 grid titled "CENTERS OF TRIANGLES BINGO!" with numbered spaces 1 through 25.
- Answer Key Table:** A table with 5 rows and 5 columns containing numerical values and geometric terms.

16	88°	16.6	17.7	18
Median	26°	50	Perpendicular Bisector	68°
13	10.8	45	7.5	6
4	42	24	28	19°
39	37	Angle Bisector	9	8.3