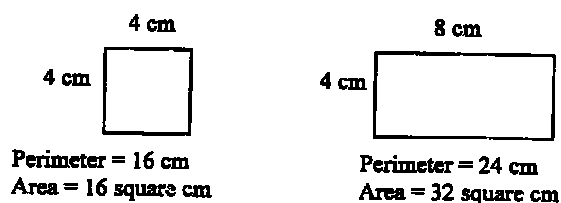


## Exploring New Knowledge: The Relationship Between Perimeter And Area

### Scenario

Imagine that one of your students comes to class very excited. She tells you that she has figured out a theory that you never told the class. She explains that she has discovered that as the perimeter of a closed figure<sup>1</sup> increases, the area also increases. She shows you this picture to prove what she is doing:



How would you respond to this student?

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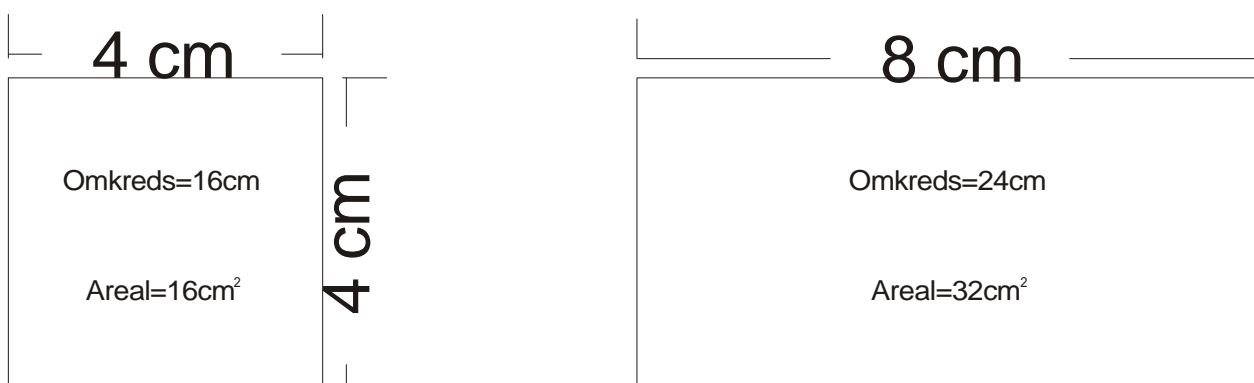
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Og da sproget ikke skal være en hindring for at nogen kan komme i gang så har jeg lige skrevet oplægget i artiklen om til dansk:

### Udforskning af ny viden: Sammenhæng mellem omkreds og areal

#### Scenarium

Forestil dig, at en af dine elever en dag møder dig meget ivrigt, da du træder ind i klassen. Hun fortæller dig, at hun har fundet ud af noget med omkreds og areal, som du aldrig har fortalt i klassen. Hun forklarer, at hun har opdaget, at når omkredsen af en lukket figur øges, så bliver arealet af figuren større. Hun viser dig også en tegning for at bevise sin påstand:



Hvordan vil du reagere overfor eleven?

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<sup>1</sup> The term "a closed figure" used in the scenario was intended to invite the teachers to discuss various kinds of figures. However, during the interviews teachers talked exclusively about squares and rectangles. A few Chinese teachers said that closed figure is a concept introduced at the secondary school level in China so they preferred to focus the discussion on the particular figure mentioned by the student.