

SHADE

Category: Number (Percentages/Fractions/Decimals/Estimation)
Year Level: Any (aimed mainly at lower/middle secondary)
ADD: shade.cat (setup.cat, scores.cat) ([CasioEd Website](#))
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 for School Mathematics

Description: This ADD is presented in a game format that can cater up to 5 players. The calculator produces 5 randomly generated questions. Each question presents a bar that has a proportion shaded. The user is then asked to enter the proportion. Users can choose to enter their answers one of three ways – as a percentage, decimal or fraction. There are also three difficulty levels.

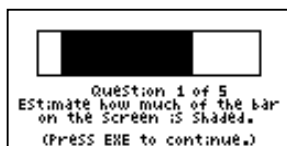
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1: Percentage
2: Decimal
3: Fraction
What mode should be
used?
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Instructions: The breakdown of the levels is as follows:

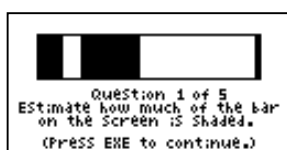
	<i>Beginner</i>	<i>Moderate</i>	<i>Hard</i>
<i>Percentage</i>	Multiples of 10%	Multiples of 5%	Any integer value
<i>Decimal</i>	Multiples of 0.1	Multiples of 0.05	Multiples of 0.01
<i>Fraction</i>	Denominators of 3, 4	Denominators of 3, 4, 10	Denominators of 2-20

In the Beginner level, the range of numbers to choose from is relatively small, so it is not unusual to have a repeat of a proportion within the same game.

In the Moderate and Hard levels, the bar is shaded non-continuously, to add to the challenge.



- Moderate level sees the shading occur in one proportion of the bar, but not from the edge.



- Hard level sees the shading of the bar in three different sections.