

Focus
Standards
and Claim

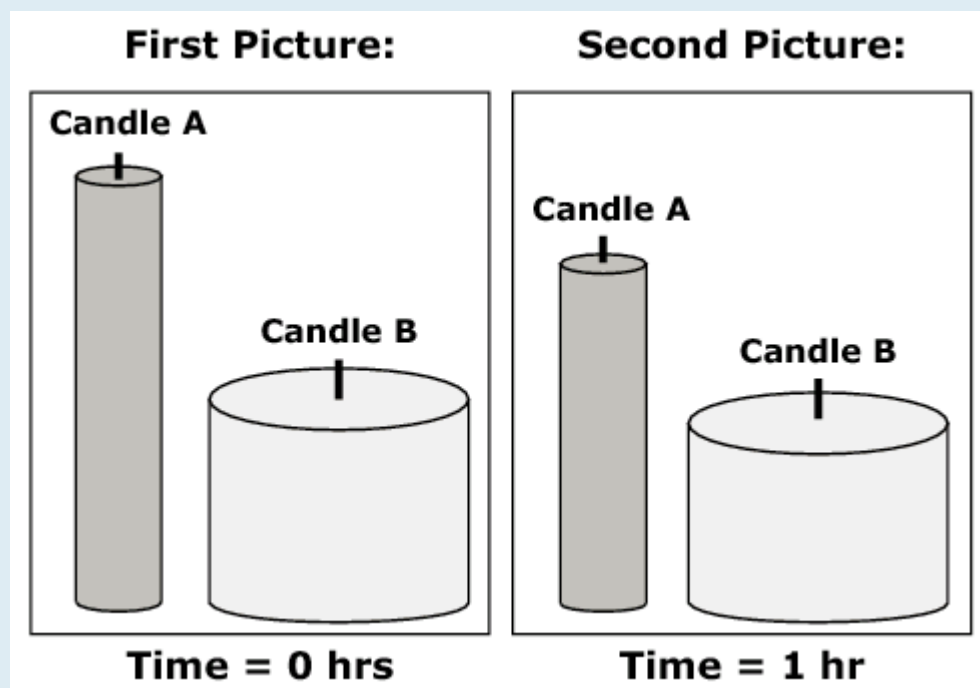
Claim 2
6.RP.A.3

Stimulus

Lights, Candles, Action!

Your friend Abbie is making a movie. She is filming a fancy dinner scene and she has two types of candles on the table. She wants to determine how long the candles will last.

She takes a picture, lights the candles, and then lets them burn for 1 hour. She then takes a second picture. You can assume that each candle burns at its own constant rate.



Candle Type A initial height = 20 cm

Candle Type B initial height = 10 cm

Candle Type A height after burning for 1 hour = 16 cm

Candle Type B height after burning for 1 hour = 9 cm

You will use this information to help Abbie think about the candles she might use for her film.

<h3>Item Prompt</h3>	<p>Candles A and B are lit at the same time. What will be the height, in cm, of each candle after 3 hours of burning?</p> <p>Candle Type A: <input style="width: 200px; height: 30px;" type="text"/></p> <p>Candle Type B: <input style="width: 200px; height: 30px;" type="text"/></p>
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Scoring Guide

SCORE	1 POINT	0 POINTS
	The student provides both correct answers: Candle Type A will be 8 cm and Candle Type B will be 7 cm.	All other responses

Sample Responses

Student Sample A



Candle Type A:

Candle Type B:

SCORE RATIONALE

Correct response. The student correctly gave the height, in cm, of Candle Type A and Candle Type B after 3 hours of burning.

Student Sample B



Candle Type A:

Candle Type B:

SCORE RATIONALE

Incorrect response. Instead of providing the correct height, in cm, of each candle after 3 hours of burning, the values suggest that the student may have found how much of each candle is burned in three hours: $4 \times 3 = 12$ cm; $1 \times 3 = 3$ cm.

Student Sample C



Candle Type A:

Candle Type B:

SCORE RATIONALE

Incorrect response. The values suggest the student may have found the height of each candle, in cm, after 4 hours of burning.

Student Sample D



Candle Type A:

Candle Type B:

SCORE RATIONALE

Incorrect response. The height for Candle Type A is correct, but the height for Candle Type B is not.

Student Sample E



Candle Type A:

Candle Type B:

SCORE RATIONALE

Incorrect response. The student may have made a minor calculation error in finding the difference between 12 and 4. The height for Candle Type B is correct.