

High School / Scoring Key Lights, Candles, Action!

→ SMARTER BALANCED PERFORMANCE TASK

Item 6

Claim 4
FLE.B.5

SAMPLE	SCORE	RATIONALE
A	2	The student identified values for k and n that result in Candle Type C and Candle Type D burning out in exactly 8 hours.
B	0	The student provided values for k and n that are not reasonable in this situation for either candle. This response earns 0 points.
C	0	The student provided values for k and n that would work for Candle Type D if the equation were $h = k - nt$, instead of the given equation, $h = k + nt$. Because neither set of values fits the given requirements, this response earns 0 points.
D	1	The student provided appropriate values of k and n for Candle Type C only. This response earns partial credit of 1 point.
E	2	The student identified values for k and n that result in Candle Type C and Candle Type D burning out in exactly 8 hours.
F	0	The student provided values for k and n that do not fit the requirements for either candle. The student likely switched the meanings of k and n , and also did not consider the need for negative values for the burn rate. This response earns 0 points.
G	1	The student provided appropriate values of k and n for Candle Type D only. This response earns partial credit of 1 point.
H	2	The student identified values for k and n that result in Candle Type C and Candle Type D burning out in exactly 8 hours. Even though the units given for n are incorrect (should be cm/hour), the problem requires correct numerical values only, so this response earns full credit.
I	0	The student provided values for k and n that would work for both candles if the equation was $h = k - nt$ instead of the given equation, $h = k + nt$. Because neither set of values fits the given requirements, this response earns 0 points.