

Lights, Candles, Action

1) A)

A = 20cm melting for 1 hour = 16cm
B = 10cm melting for 1 hour = 9cm

A = 8cm > After burning 3 hours
B = 7cm

B) Abbie is correct because candle B burns slower than candle A. After 5 hours, candle A would be at 5cm & for candle B, they would be at 5cm. That is why Abbie is right.

What Do You Call Two Railroad Trains After a Head-on Collision?

First, SIMPLIFY each expression below. Then EVALUATE the expression if

$$a = 3, b = -2, \text{ and } c = -6$$

Find the simplified expression in the answer column and notice the letter next to it. Find the value of the expression at the bottom of the page and write this letter above it.

- ① $9a + 3 - 2a$
- ② $8 - 5b - 1 = 7$
- ③ $-4b - 6 + 20b - 3$
- ④ $2 - (-8c) + 24 - 7c$
- ⑤ $5a - 9b + a - 6b$
- ⑥ $3b + 11c - 4b - c$
- ⑦ $9a - 1 + 8c - 8a + c$
- ⑧ $12c + 5a + 7 + (-13c) + 4a$
- ⑨ $-15 - 6c + 3b - 6c + 9 - 2b$
- ⑩ $3a + 7b + 2c - a - 4b$
- ⑪ $-8a - b - (-6c) - 2a - b - 5c$
- ⑫ $b - 4c + 3a - c - 9b - 4a$
- ⑬ $-3c + 7a + 5 + 17b + 2c + b + (-7a)$
- ⑭ $2 - a - (-b) + c + (-a) - b - (-c)$

- ⓑ $16b - 3c + 5$
- ⓓ $c + 26 = 20$
- ⓔ $7a + 3 = 24$
- ⓓ $18b - c + 5$
- ⓧ $b - 12c - 6 = 9 - 6 - 6 = -3$
- ⓐ $-5b + 7 = 10 - 6 = 4$
- ⓐ $-b + 10c = 2 - 60 = -58$
- Ⓦ $16b - 9 = 32 - 9 = 23$
- ⓔ $9a - c + 7 = 27 - (-6) + 7 = 32$
- Ⓚ $-a - 8b - 5c = -3 - 16 + 30 = 11$
- ⓓ $-2a + 2c + 2 = -6 - 12 + 2 = -16$
- ⓔ $6a - 15b = 18 + 30 = 48$
- Ⓢ $b - 10c + 6 = -2 + 60 + 6 = 64$
- Ⓒ $2a + 3b + 2c = 6 - 6 + 12 = 12$
- ⓓ $a + 9c - 1 = 3 - 54 - 1 = -52$
- ⓓ $-a - 10b - 8c = -3 + 20 + 48 = 65$
- Ⓖ $-10a - 2b + c = -30 + 4 - 6 = -32$

A	W	R	E	C	K	E	D	T	A	N	G	L	E
-58	-41	-16	24	-12	43	48	-52	64	17	-25	-32	20	40

What Happened to Ray Floob After He Fell Off the Empire State Building?

Simplify each expression below. Circle the letter of each answer. Then rearrange the circled letters in each section to make a word. Write the words in order in the boxes at the bottom of the page. You will find the answer to the title question.

① $3x + 2(5x - 7) = 13x - 14$	<input type="checkbox"/> S $20x - 3$	<input checked="" type="checkbox"/> Y $20x - 18$ 3
② $9 - 3(2x - 4)$	<input checked="" type="checkbox"/> E $13x - 14$ 1	<input type="checkbox"/> N $5x + 11$
③ $8x - 6(3 - 2x)$	<input checked="" type="checkbox"/> T $5x + 15$ 4	<input checked="" type="checkbox"/> H $-6x + 21$ 2
④ $-5 + 5(x + 4)$	<input checked="" type="checkbox"/> Q $14n + 36$ 5	<input type="checkbox"/> S $19n + 36$
⑤ $4(6n + 9) - 10n$	<input type="checkbox"/> E $-12n + 13$	<input checked="" type="checkbox"/> N $-12n + 17$ 6
⑥ $14 - 3(4n - 1)$	<input checked="" type="checkbox"/> W $8n + 32$ 7	<input type="checkbox"/> T $8n - 1$
⑦ $-8n - 8(-4 - 2n)$	<input checked="" type="checkbox"/> L $2k + 7$ 11	<input checked="" type="checkbox"/> C $-13k + 34$ 9
⑧ $7k - 2(3k + 1) - 9$	<input checked="" type="checkbox"/> A $-7k + 37$ 10	<input type="checkbox"/> I $-7k + 30$
⑨ $-6 + 5(8 - k) - 8k$	<input type="checkbox"/> K $2k - 4$	<input checked="" type="checkbox"/> L $k - 11$ 8
⑩ $k + 1 - 4(2k - 9)$	<input type="checkbox"/> A $14x + 30$	<input type="checkbox"/> R $6x + 52$
⑪ $-10k - 3 + 2(5 + 6k)$	<input checked="" type="checkbox"/> H $3x + 21$ 14	<input checked="" type="checkbox"/> M $x + 52$ 12
⑫ $8 + 9x + 4(11 - 2x)$	<input type="checkbox"/> T $3x + 6$	<input checked="" type="checkbox"/> Y $14x + 21$ 13
⑬ $9 - 3(-4 + 3x) + 12x$	<input type="checkbox"/> A $12y - 4$	<input checked="" type="checkbox"/> X $12y - 2$ 15
⑭ $5(2y - 4) + 2(y + 9)$	<input type="checkbox"/> W $-42u + 9$	<input checked="" type="checkbox"/> Y $-42u + 42$ 17
⑮ $-4(3u - 1) + 7(3 - 2u)$	<input type="checkbox"/> S $13u - 12$	<input type="checkbox"/> D $-5u + 25$
⑯ $6(-5u + 1) - 3(4u - 12)$	<input checked="" type="checkbox"/> R $13u - 7$ 18	<input checked="" type="checkbox"/> A $-26u + 25$ 16
⑰ $3(-u - 5) + 8(2u + 1)$		

The y Now Call Him X Ray