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	Klasse: 20		Dato: 3. december 2020	Fag: Matematik A

### Opgave 007

a)  $(a - 2b)^2 + (2a + b)^2 - (a + 2b) \cdot (a - 2b)$

$$a^2 + 4b^2 - 4ab + 4a^2 + b^2 + 4ab - (a^2 - 2ab + 2ab - 4b^2)$$

$$a^2 + 4a^2 + 4b^2 + b^2 - 4ab + 4ab - (a^2 - 2ab + 2ab - 4b^2)$$

$$5a^2 + 5b^2 - a^2 + 4b^2$$

$$4a^2 + 9b^2$$

b)  $(5c + 7d)^2 - (7d - 5c) \cdot (7d + 5c) + (7d - 5c)^2$

$$25c^2 + 49d^2 + 70cd - (49d^2 + 45dc - 45dc - 25c^2) + 25c^2 + 49d^2 - 70cd$$

$$25c^2 + 25c^2 + 49d^2 + 49d^2 + 70cd - 70cd - (49d^2 - 25c^2)$$

$$50c^2 + 98d^2 - (49d^2 - 25c^2)$$

$$50c^2 + 98d^2 - 49d^2 + 25c^2$$

$$75c^2 + 49d^2$$