

## Neulich in der Klausur ...

2. A 3-kg object is released from rest at a height of 5m on a curved frictionless ramp. At the foot of the ramp is a spring of force constant  $k = 100 \text{ N/m}$ . The object slides down the ramp and into the spring, compressing it a distance  $x$  before coming to rest.

10 (a) Find  $x$ .

5 (b) Does the object continue to move after it comes to rest? If yes, how high will it go up the slope before it comes to rest?

Handwritten calculations:

$$U = 3(9.81)(5) = 147.15$$

$$U_s = \frac{1}{2}(100)x^2 = 50x^2 \dots?$$

Handwritten note: NO. there is an elephant in the way.

A red circle with a question mark is drawn around the elephant in the diagram. A red circle with the number 0 is drawn to the right.

Diese beiden Arbeiten bestätigen eigentlich die Theorie der Gehirnhälften:

Wer eine mathematische Schwäche hat, hat dafür umso mehr Kreativität!

PETER

1.21

4b) Expand

$$(a+b)^n$$

$$= (a + b)^n$$

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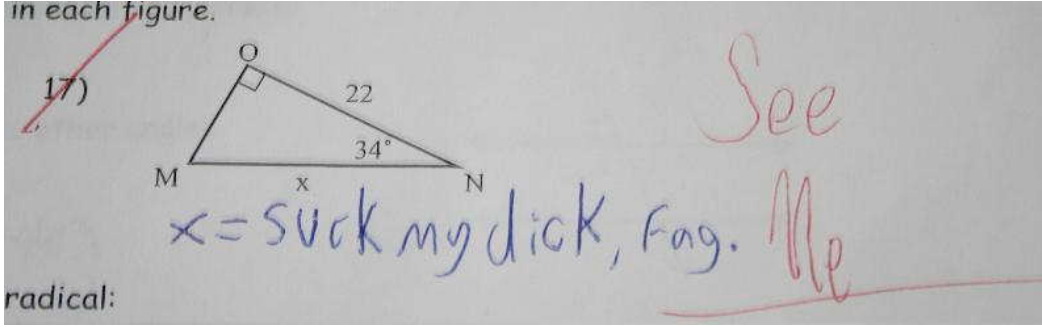
etc...

**CHECKING IN** (Answer on your own and hand in to your instructor)

The water of the earth's oceans stores lots of heat. An engineer designed an ocean liner that would extract heat from the ocean's waters at  $T_h = 10^\circ\text{C}$  (283 K) and reject heat to the atmosphere at  $T_l = 20^\circ\text{C}$  (293 K). He thought he had a good idea, but his boss fired him. Explain.

Because he slept with his boss' wife. - Jathun... oh dear!

Manche Dozenten vertragen leider keine Wahrheit.



Hier hat sich jemand wohl im Ton vergriffen.

**Aber das dicke Ende kommt noch...**

