M17 Concept Question 1

Given that dislocations are the underlying mechanism of yield in metals. Which of the following strategies would be most likely to cause an increase in the yield strength of a metal:

- 1. Increasing the modulus of the material
- 2. Increasing the melting temperature

3. Increasing the resistance to dislocation motion

4. Reducing the density of dislocations in the material

5. Increasing the density of dislocations in the material

- 6. Some other answer
- 7. Do not know/do not understand