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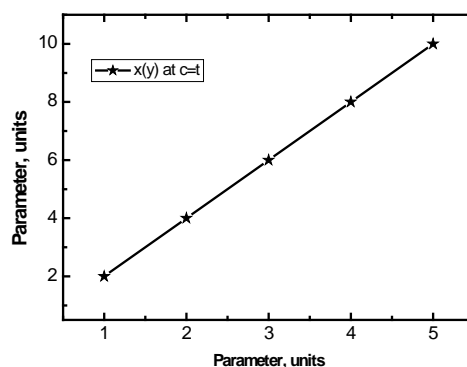
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$$a^2 + 1/2c^3 = \exp[\Delta\theta - E/RT]. \quad (1)$$

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Table 1. A sample table

Samples	Parameter 1, unit	Parameter 2, unit	Parameter 3, unit
Sample 1	60	20	220
Sample 2	80	20*	380

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#### 6. Conclusions

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#### References

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Examples:

[1] Koch CC, Ovid'ko IA, Seal S, Veprek S. *Structural Nanocrystalline Materials: Fundamentals and Applications*. Cambridge: Cambridge University Press; 2007.

[2] Hull D, Bacon DJ. *Introduction to Dislocations*. 5nd ed. Amsterdam: Butterworth-Heinemann; 2011 Available from: <https://www.sciencedirect.com/science/book/9780080966724?via%3Dihub> [Accessed 19th June 2018].

[3] Romanov AE, Vladimirov VI. Disclinations in crystalline solids. In: Nabarro FRN (ed.) *Dislocations in Solids*. Amsterdam: North Holland; 1992;9. p.191-402.

[4] Mukherjee AK. An examination of the constitutive equation for elevated temperature plasticity. *Materials Science and Engineering: A*. 2002;322(1-2): 1-22.

[5] Soer WA, De Hosson JTM, Minor AM, Morris JW, Stach EA. Effects of solute Mg on grain boundary and dislocation dynamics during nanoindentation of Al–Mg thin films. *Acta Materialia*. 2004;52(20): 5783-5790.

- [6] Matzen ME, Bischoff M. A weighted point-based formulation for isogeometric contact. *Computer Methods in Applied Mechanics and Engineering*. 2016;308: 73-95. Available from: doi.org/10.1016/j.cma.2016.04.010.
- [7] Joseph S, Lindley TC, Dye D. Dislocation interactions and crack nucleation in a fatigued near-alpha titanium alloy. To be published in *International Journal of Plasticity*. Arxiv. [Preprint] 2018. Available from: <https://arxiv.org/abs/1806.06367> [Accessed 19th June 2018].
- [8] Pollak W, Blecha M, Specht G. *Process for the production of molded bodies from silicon-infiltrated, reaction-bonded silicon carbide*. US4572848A (Patent) 1983.
- [9] Brogan C. *Experts build pulsed air rig to test 3D printed parts for low carbon engines*. Available from: <http://www.imperial.ac.uk/news/186572/experts-build-pulsed-test-3d-printed/> [Accessed 19th June 2018].

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