**Anleitung: Quadratwurzel Einstieg**

**(ohne Pythagoras)**

AB 0 mögliche Repetition und tiefe Einstiegshürde

* Ziel: Flächenberechnung repetieren / Abkürzung A / Einheiten [cm2; m2] / Notation

AB 1 Umkehrfunktion: Seitenlängen bestimmen bei vorgegebenen Quadratflächen

* Hinweise: AB1 farbig ausdrucken, damit in der Klasse über die verschiedenen Quadrate einfach gesprochen werden kann
* Ziele:
  + Quadratzahlen erkennen und nutzen 1, 4, 9, 16, 25
  + Weitere Quadratseitenlängen abschätzen im 100er Raum

AB 2 funktionale Zusammenhänge aufzeigen

**AB 0: Quadratflächen bestimmen**

* Wie gross sind die Quadratflächen bei   
  den Seitenlängen a?

a = 2cm

a = 4cm

a = 7cm

* Wie lauten die Rechnungen zur Bestimmung der Quadratflächen?

A =

* *\*Achte dich auf die Einheiten. Welche weiteren Einheiten gibt es für Flächen?*

**AB 1: Wie gross sind die Quadratseitenlängen? Beschrifte**

* Welche Quadratseitenlängen kennst du im Kopf?
* Welche Quadratseitenlängen kannst du exakt nennen?
* Wie kannst du die übrigen Quadratseitenlängen abschätzen?

A = 55cm2

A=0.16cm2

A = 16mm2

A = 25cm2

A = 36cm2

A = 9cm2

A = 45cm2

A = 80cm2

**AB 2: Trage alle Zahlenpaare von bekannten Quadratflächen und ihren Seitenlängen im Koordinatensystem ein**

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| Seitenlänge |  |  |  |  |  |  |  |  |  |  | x |
| Quadratfläche |  |  |  |  |  |  |  |  |  |  | x2 |

y = x2 Quadratfläche

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