Exemple :
$$A = \mathbb{Z}, \ I = 6\mathbb{Z}$$

$$\sqrt{I} = \sqrt{6\mathbb{Z}} = 6\mathbb{Z}$$

$$\sqrt{24\mathbb{Z}} = \sqrt{(2^3 \times 3)\mathbb{Z}} = \sqrt{2^3\mathbb{Z}} \cap \sqrt{3\mathbb{Z}} = 2\mathbb{Z} \cap 3\mathbb{Z} = ppcm(2,3)\mathbb{Z} = 6\mathbb{Z}$$