1. $\sqrt{6400} = \boxed{80}$

2. Une année-lumière. $\boxed{9.45 \cdot 10^{12} \text{ km}}$

3. $(2x + 1)(4x - 5) = 0$

$$\boxed{S = \left\{ -\frac{1}{2}; \frac{5}{4} \right\}}$$

4. $0.000\,05 \cdot 0.0006 \cdot 0.007 =$
   $\boxed{21 \cdot 10^{-11}}$

5. $(x + 2)(x - 3)(2x - 5)(x - \sqrt{3}) = 0$

$$\boxed{\begin{array}{l} S_{\mathbb{N}} = \{\, 3 \,\} \\[4pt] S_{\mathbb{Z}} = \{\, -2; 3 \,\} \\[4pt] S_{\mathbb{Q}} = \left\{ -2; 3; \frac{5}{2} \right\} \\[6pt] S_{\mathbb{R}} = \left\{ -2; 3; \frac{5}{2}; \sqrt{3} \right\} \end{array}}$$