Estimate the following values. No calculators allowed!

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| --- | --- | --- | --- |
| 1. $\sqrt{13}$
 | 1. $\sqrt{75}$
 | 1. $\sqrt[3]{50}$
 | 1. $\sqrt{34}$
 |

**Simplify.**

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| 1. $\sqrt{x^{2}y^{2}}$
 | 1. $\sqrt{32x^{4}w^{2}}$
 | 1. $\sqrt[3]{27x^{3}y^{6}}$
 |
| 1. $\sqrt[3]{24y^{2}w^{8}}$
 | 1. $\sqrt[4]{x^{8}y^{5}}$
 | 1. $\left(\sqrt{45x^{2}y}\right)^{2}$
 |
| 1. $\sqrt[3]{\left(xy\right)^{3}}$
 |  |  |