**Estimate.**

|  |  |  |
| --- | --- | --- |
| 1. 9% of 56
 | 1. 45 is what % of 28
 | 1. $5\frac{3}{4}+ \frac{1}{3}$
 |
| 1. $\frac{5}{6}∙15$
 | 1. $ 12÷\frac{7}{8}$
 | 1. $\sqrt{57}$
 |
| 1. $\sqrt{12}$
 | 1. If $\sqrt{a}=10.34$,

*a* ≈\_\_\_\_\_\_\_ | 1. If $\sqrt[3]{b}=4.832$,

*b* ≈ \_\_\_\_\_\_ |

**Simplify.**

|  |  |  |
| --- | --- | --- |
| 1. $\sqrt[3]{\left(5.3xy\right)^{3}}$
 | 1. $\sqrt[6]{a^{3}b^{9}}$
 | 1. $\sqrt{25x^{10}y^{7}}$
 |
| 1. $\left(\sqrt{13a^{3}}\right)^{2}$
 | 1. $\sqrt[4]{x^{4}y^{8}}$
 | 1. $\sqrt{\left(2x^{2}y^{3}\right)^{3}}$
 |

**Indicate if the following have a real number solution (Yes) or not (No).**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. $\sqrt{-16}$

Yes No | 1. $\sqrt[4]{-9x^{4}}$

Yes No | 1. $ \sqrt[5]{-34xy}$

Yes No | 1. $\sqrt[8]{2.4 a}$

Yes No |

**Complete the following problems from the textbook.** **p.190 #19-21, 31, 32, 47-50, 51-54**