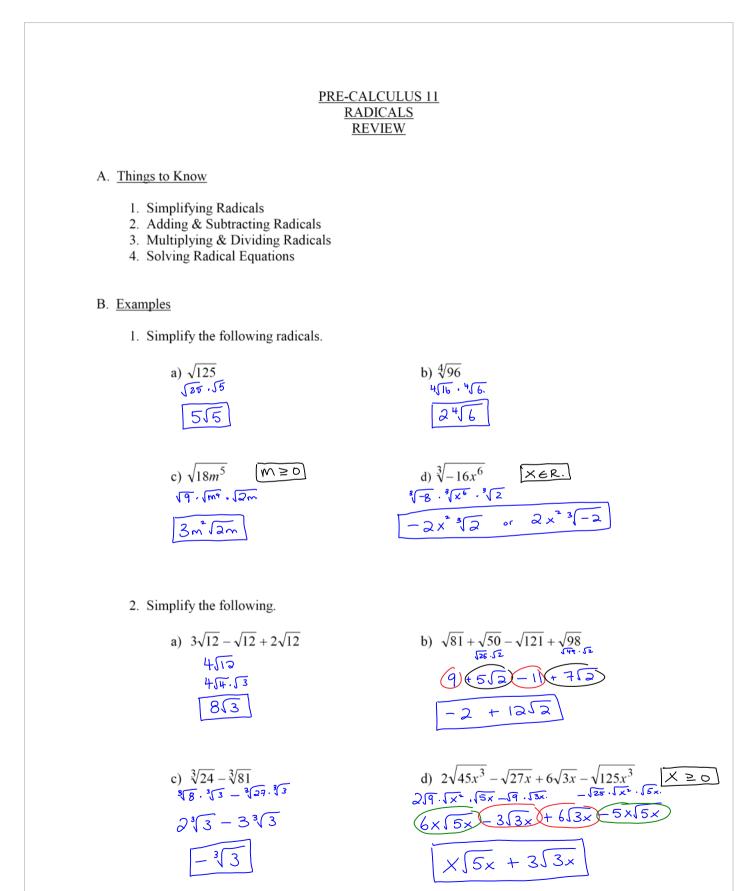
Radical Review

November-29-17 9:43 AM



3. Simplify the following.

a)
$$(-3\sqrt{6})(2\sqrt{2})$$

= $-6\sqrt{12}$
 $-6\sqrt{4} \cdot \sqrt{3}$
= $-12\sqrt{3}$
b) $\sqrt[3]{16}(\sqrt[3]{4} + \sqrt[3]{2})$
 $\sqrt[3]{64} + \sqrt[3]{2}(\sqrt[3]{3} - \sqrt[3]{4})$
 $\sqrt[3]{16}(\sqrt[3]{4} + \sqrt[3]{2})$
 $\sqrt[3]{16}(\sqrt[3]{4} + \sqrt[3]{16})$
 $\sqrt[3]{16}(\sqrt[3]{16}(\sqrt[3]{4} + \sqrt[3]{16})$
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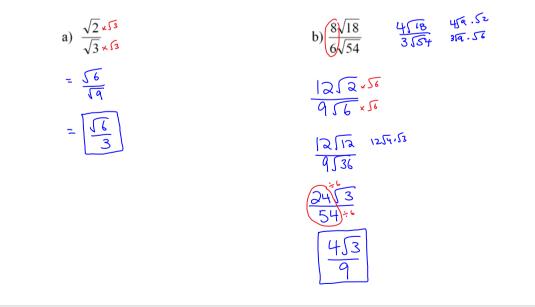
c)
$$(\sqrt{2} - \sqrt{5})(\sqrt{2} + \sqrt{5})$$

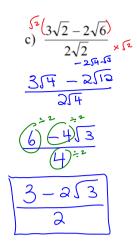
 $\sqrt{44}$ $(\sqrt{2} - \sqrt{5})(\sqrt{2} + \sqrt{5})$
 $\sqrt{24}$ $(\sqrt{2} - \sqrt{5})(\sqrt{2} + \sqrt{5})$
 $\sqrt{25}$
 $\sqrt{2} - \sqrt{5}$
 $= (-3)(\sqrt{5})(\sqrt{2} + \sqrt{5})(\sqrt{2} + \sqrt{5}))$

d)
$$(3\sqrt{3} - \sqrt{8})^{2}$$

 $(3\sqrt{3} - \sqrt{8})^{2}$
 $(3\sqrt{3} - \sqrt{8})^{2}$
 $3\sqrt{3} - \sqrt{8}$
 $3\sqrt{3} - \sqrt{8}$
 $-3\sqrt{9} + \sqrt{64}$
 $-3\sqrt{9} + \sqrt{64}$

4. Rationalize the denominator.





d)
$$(\sqrt{8} + \sqrt{6})(56 + 52)$$

 $(\sqrt{6} - \sqrt{2})(16 + 52)$
 $\sqrt{48} + 56 + 536 + 512$
 $\sqrt{4} + 56 + 536 + 52$
 $\sqrt{4} + 56 + 52$
 $\sqrt{5} + 35 + 35$
 $\sqrt{2} + 56 + 52$
 $\sqrt{2} + 56 + 52$

5. Solve the following radical equations.

a)
$$2\sqrt{2x+4} + 12 = 4$$

 $4\sqrt{2x+4} = -8$
 $(\sqrt{2x+4})^2 = (-4)^2$
 $2x + 4 = -16$
 $2x + 4 = -2$
 $2x + 2$
 $2x + 2$

Assignment: Pg. 156 #2 – 13 (Omit #4b & 4d)