I. Be prepared for what each question on the test will cover. Review your notes. Review your worksheets. Work and rework the practice test. Work and rework these extra problems from your textbook's chapter review. You can find solutions to these problems in the back of your textbook and your solutions manual.

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II. Get your ALEKS objective percentage as high as possible. This will help you prepare for the test and if your percentage is at least 80% when the objective closes (the day of the test), you will receive the bonus points.

III. Work extra problems in the textbook (you have answers).

IV. Complete the practice test on the following pages and be prepared to go over it on the day of the review.
(1) Simplify completely.
   a) $\sqrt{36}$  
   b) $-\sqrt{64}$

(2) Simplify completely.
   a) $\sqrt[3]{-125}$  
   b) $-\sqrt[4]{16}$

(3) Find the domain of the radical function. Write your answer in interval notation.
   $g(x) = \sqrt{2x - 9}$

(4) Simplify completely.
   a) $16^{3/4}$  
   b) $81^{-1/4}$  
   c) $-36^{1/2}$

(5) Simplify completely.
   a) $5^{2/3} \cdot 5^{7/3}$  
   b) $\frac{5^{12/5}}{5^{7/5}}$

(6) Simplify completely.
   a) $\sqrt[6]{16^3}$  
   b) $\sqrt[2]{27^3}$

(7) Simplify completely. Assume all variables represent nonnegative numbers.
   a) $\sqrt{80}$  
   b) $\sqrt{50x^5y^3z^2}$

(8) Simplify completely. Assume all variables represent nonnegative numbers.
   a) $\sqrt{2} \cdot \sqrt{12}$  
   b) $\sqrt{a^7} \cdot \sqrt{a^{10}}$

(9) Simplify completely. Assume all variables represent nonnegative numbers.
   a) $\sqrt[3]{27a^6}$  
   b) $\sqrt[4]{162a^8b^{11}}$

(10) Add or subtract as indicated. Simplify completely. Assume all variables represent nonnegative numbers.
   a) $\sqrt{18} + 2\sqrt{50} + \sqrt{20}$
   b) $\sqrt{18x^2} + 3x\sqrt{2} - 2\sqrt{32x^2}$

(11) Multiply. Simplify completely. Assume all variables represent nonnegative numbers.
   a) $\sqrt{5}(\sqrt{7} - \sqrt{3})$
   b) $(9 + \sqrt{3})(9 - \sqrt{3})$
   c) $(\sqrt{x} + \sqrt{5})^2$
(12) Rationalize the denominator. Simplify completely.
\[
\frac{7}{\sqrt{3}}
\]

(13) Rationalize the denominator. Simplify completely.
\[
\frac{\sqrt{5}}{\sqrt{7} - \sqrt{3}}
\]

(14) Solve.
\[
\sqrt{3}x - 11 = x - 5
\]

(15) Simplify completely.

\[
a) \sqrt{-36} \quad b) \sqrt{-25} \quad c) \sqrt{-20}
\]

(16) Perform the indicated operations and simplify.

\[
a) (7 + 2i) - (3 - 5i) \quad b) (3 + 9i) + (8 - 10i)
\]

(17) Perform the indicated operations and simplify.

\[
a) (9 + 3i)(2 - 5i) \quad b) \frac{8+i}{2-3i}
\]

(18) Complete the square for each expression. Indicate the number that goes in the box and factor the trinomial completely.

\[
a) x^2 + 14x + \square \quad b) x^2 - 20x + \square
\]

(19) Solve by completing the square. You must solve by completing the square to receive credit.
\[
m^2 - 2m + 5 = 0
\]

(20) Solve by the quadratic formula. You must solve by the quadratic formula to receive credit.
\[
x^2 - 4x + 1 = 0
\]