Practice 6.2 A

Rational Exponents

Match each expression with a fractional exponent to an equivalent radical expression. Write the correct letter on the answer blank.

1. ****  A. 

2. ****  B.

3. **** C. ****

4. **** D. ****

Simplify each expression. All variables represent nonnegative numbers.

 5.  6.7. ****

 8.  9. **** 10. ****

 11.  12. **** 13. ****

 14.  15. **** 16. ****

 17. Given a square with area x, you can use the formula  to estimate the length of the diagonal of the square. Use the formula to estimate the length of the diagonal of a square with area 100 cm2.

6.2 Practice B

Rational Exponents

Simplify each expression. All variables represent nonnegative numbers.

 1.  2.  3. 

 4.  5.  6. 

 7.  8. **** 9. ****

 10.  11. **** 12. ****

 13.  14.  15. 

 16. ()4 17. **** 18. 

 19. Given a cube with volume V, you can use the formula  to find the perimeter of one of the cube’s square faces. Find the perimeter of a face of a cube that has volume 125 m3.