

Review 6  
CM/M12

2.  $3x^3 \cdot 2x^2y \cdot 4x^2y$  is equivalent to:

- F.  $9x^7y^2$
- G.  $9x^{12}y^2$
- H.  $24x^7y^2$
- J.  $24x^{12}y$
- K.  $24x^{12}y^2$

5. The oxygen saturation level of a river is found by dividing the amount of dissolved oxygen the river water currently has per liter by the dissolved oxygen capacity per liter of the water and then converting to a percent. If the river currently has 7.3 milligrams of dissolved oxygen per liter of water and the dissolved oxygen capacity is 9.8 milligrams per liter, what is the oxygen saturation level, to the nearest percent?

- A. 34%
- B. 70%
- C. 73%
- D. 74%
- E. 98%

6. A rectangular lot that measures 150 ft by 200 ft is completely fenced. What is the approximate length, in feet, of the fence?

- F. 300
- G. 350
- H. 400
- J. 700
- K. 1,400

7. The expression  $a[b + (c - d)]$  is equivalent to:

- A.  $ab + ac - ad$
- B.  $ab + ac + ad$
- C.  $ab + ac - d$
- D.  $ab + c + d$
- E.  $ab + c - d$

11. A formula for the volume  $V$  of a sphere with radius  $r$  is

$$V = \frac{4}{3}\pi r^3.$$
 If the radius of a spherical rubber ball is

$1\frac{1}{4}$  inches, what is its volume to the nearest cubic

inch?

- A. 5
- B. 7
- C. 8
- D. 16
- E. 65

20. If a rectangle measures 54 meters by 72 meters, what is the length, in meters, of the diagonal of the rectangle?

- F. 48
- G. 63
- H. 90
- J. 126
- K. 252

22. What is the slope-intercept form of  $8x - y - 6 = 0$  ?

- F.  $y = -8x - 6$
- G.  $y = -8x + 6$
- H.  $y = 8x - 6$
- J.  $y = 8x + 6$
- K.  $y = 6x - 8$

23. Which of the following is a solution to the equation  $x^2 - 36x = 0$  ?

- A. 72
- B. 36
- C. 18
- D. 6
- E. -6

31. What is the  $x$ -coordinate of the point in the standard  $(x,y)$  coordinate plane at which the 2 lines  $y = 2x + 6$  and  $y = 3x + 4$  intersect?

- A. 1
- B. 2
- C. 4
- D. 6
- E. 10