

2.8 Review

Give these review problems a try.

- 1 Which of the following is an expression for the absolute value of the the cube root of the sum of x and x^2 ?
 - (a) $|(x+x^2)^3|$
 - (b) $|\sqrt[3]{x} + x^2|$
 - (c) $|\sqrt[3]{x+x^2}|$
 - (d) $|\sqrt{x+x^2}|$

2 What is the result when the expression $3x|x-4| + 2x^2$ is evaluated for x = 3?

- (a) 9
- (b) 27
- (c) 45
- (d) 15
- **3** Deanna and Jadrian decide to open a pizza shop. Each day, they spend \$1100 on ingredients. They charge \$15 for each pizza they sell. If they sell *P* pizzas tomorrow, how much money (in dollars) will they make?
 - (a) 1100 P
 - (b) $1100 \cdot P + 15$
 - (c) 15P
 - (d) 15P 1100
- 4 A marathon is 26.2 miles long. A group of x friends decide that, instead of running the whole marathon, each of them will run an equal part of it. Which of the following is a correct expression for the distance run by each friend??
 - (a) $\frac{26.2}{r}$
 - (b) 26.2
 - (c) x
 - (d) 26.2*x*

5 What is the value of $73.2^{23-22.1} - 24 \cdot \frac{12}{2^{2.1}-1}$, rounded to two decimal places?

- (a) −39.97
- (b) 4.47
- (c) -14.42
- (d) 52.85

6 Which of the following expressions has the same value as 1+2+3+4+5?

(a) $\frac{(5+1)(5)}{2}$

(b)
$$6+5+4+3+2$$

- (c) $\frac{5^2}{2}$
- (d) 18
- **7** (a) $31.556736 \cdot 10^6$ seconds
 - (b) $3.1556736 \cdot 10^7$ seconds
 - (c) $5.259256 \cdot 10^5$ seconds
 - (d) $1.314864 \cdot 10^6$ seconds



- 8 You are moving to a new house. You want to put all of your belongings into storage. You have 10 boxes whose sides are each 45 centimeters long. You have 5 boxes whose sides are each 50 centimeters long. Which of the following expressions tells you how much storage space you have, in cubic centimeters? (Remember that the volume of a cube is the length of one of its sides cubed.)
 - (a) $10 \cdot 45 \cdot 3 + 5 \cdot 50 \cdot 3$ cc
 - (b) $10 \cdot 45^2 + 5 \cdot 50^2$ cc
 - (c) $10 + 45^3 \cdot 5 + 50^3$ cc
 - (d) $10 \cdot 45^3 + 5 \cdot 50^3$ cc