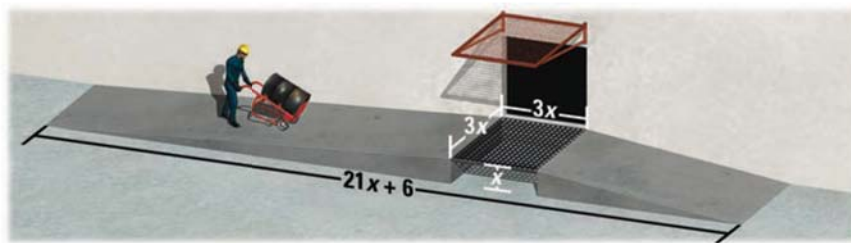


51. **CHALLENGE** You are building a pair of ramps for a loading platform. The left ramp is twice as long as the right ramp. If 150 cubic feet of concrete are used to build the two ramps, what are the dimensions of each ramp?



## MIXED REVIEW FOR TAKS

**TAKS PRACTICE** at classzone.com

### REVIEW

Lesson 2.1;  
TAKS Workbook

52. **TAKS PRACTICE** An electronics store has a 30%-off sale on all DVD players. Which statement best represents the functional relationship between the sale price of a DVD player and the original price? **TAKS Obj. 1**
- (A) The original price is dependent on the sale price.
  - (B) The sale price is dependent on the original price.
  - (C) The sale price and the original price are independent of each other.
  - (D) The relationship cannot be determined.

### REVIEW

Skills Review  
Handbook p. 991;  
TAKS Workbook

53. **TAKS PRACTICE** The area of a rectangle is  $132s^8t^{17}$  square units. The length of the rectangle is  $12s^5t^9$  units. What is the width of the rectangle? **TAKS Obj. 5**
- (F)  $11s^3t^8$  units
  - (G)  $120s^3t^8$  units
  - (H)  $144s^{13}t^{26}$  units
  - (J)  $1584s^{13}t^{26}$  units

## QUIZ for Lessons 5.4–5.6

**Factor the polynomial completely. (p. 353)**

- |                  |                          |                             |
|------------------|--------------------------|-----------------------------|
| 1. $2x^3 - 54$   | 2. $x^3 - 3x^2 + 2x - 6$ | 3. $x^3 + x^2 + x + 1$      |
| 4. $6x^5 - 150x$ | 5. $3x^4 - 24x^2 + 48$   | 6. $2x^3 - 3x^2 - 12x + 18$ |

**Divide using polynomial long division or synthetic division. (p. 362)**

7.  $(x^4 + x^3 - 8x^2 + 5x + 5) \div (x^2 + 5x - 2)$       8.  $(4x^3 + 27x^2 + 3x + 64) \div (x + 7)$

**Find all real zeros of the function. (p. 370)**

- |   |                                     |
|---|-------------------------------------|
| 9. $f(x) = 2x^3 - 19x^2 + 50x + 30$       | 10. $f(x) = x^3 - 4x^2 - 25x - 56$  |
| 11. $f(x) = x^4 + 4x^3 - 13x^2 - 4x + 12$ | 12. $f(x) = 4x^4 - 5x^2 + 42x - 20$ |

13. **LANDSCAPING** You are a landscape artist designing a square patio that is to be made from 128 cubic feet of concrete. The thickness of the patio is 15.5 feet less than each side length. What are the dimensions of the patio? **(p. 370)**

