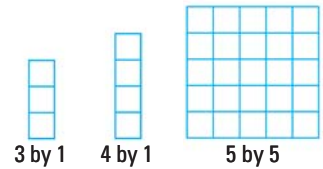


69. **CHALLENGE** You want to cover a five-by-five grid completely with x three-by-one rectangles and y four-by-one rectangles that do not overlap or extend beyond the grid.



- Explain why x and y must be whole numbers that satisfy the equation $3x + 4y = 25$.
- Find all solutions (x, y) of the equation in part (a) such that x and y are whole numbers.
- Do all the solutions from part (b) represent combinations of rectangles that can actually cover the grid? Use diagrams to support your answer.



MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW

Skills Review
Handbook p. 995;
TAKS Workbook

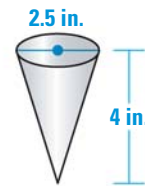
70. **TAKS PRACTICE** In isosceles triangle ABC , the interior angle A measures 110° . The measures of all three interior angles of triangle ABC are— **TAKS Obj. 6**

- (A) $110^\circ, 110^\circ,$ and 140° (B) $110^\circ, 110^\circ,$ and 110°
(C) $110^\circ, 40^\circ,$ and 30° (D) $110^\circ, 35^\circ,$ and 35°

REVIEW

TAKS Preparation
p. 608;
TAKS Workbook

71. **TAKS PRACTICE** A paper cup is shaped like the cone shown. What is the approximate volume of this paper cup? **TAKS Obj. 8**

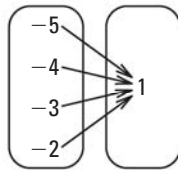


- (F) 6.5 in.^3 (G) 10.5 in.^3
(H) 26.2 in.^3 (J) 41.9 in.^3

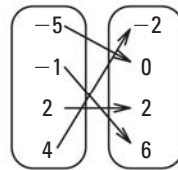
QUIZ for Lessons 2.1–2.3

Tell whether the relation is a function. *Explain.* (p. 72)

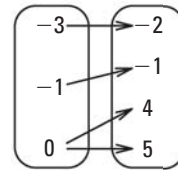
1. Input Output



2. Input Output



3. Input Output



Tell whether the lines are *parallel, perpendicular, or neither.* (p. 82)

4. Line 1: through $(-3, -7)$ and $(1, 9)$ 5. Line 1: through $(2, 7)$ and $(-1, -2)$
Line 2: through $(-1, -4)$ and $(0, -2)$ Line 2: through $(3, -6)$ and $(-6, -3)$

Graph the equation. (p. 89)

6. $y = -5x + 3$ 7. $x = 10$ 8. $4x + 3y = -24$

9. **ROWING SPEED** In 1999, Tori Murden became the first woman to row across the Atlantic Ocean. She rowed a total of 3333 miles during her crossing. The distance d rowed (in miles) can be modeled by $d = 41t$ where t represents the time rowed (in days) at an average rate of 41 miles per day. Graph the function, and determine a reasonable domain and range. Then estimate how long it took Tori Murden to row 1000 miles. (p. 72)