

41. **TAKS REASONING** In a scientific study, researchers asked men to report their heights and weights. Then the researchers measured the actual heights and weights of the men. The data for six men are shown in the table. One row of the table represents the data for one man.

Height (inches)			Weight (pounds)		
Reported	Measured	Difference	Reported	Measured	Difference
70	68	$70 - 68 = 2$	154	146	$154 - 146 = 8$
70	67.5	?	141	143	?
78.5	77.5	?	165	168	?
68	69	?	146	143	?
71	72	?	220	223	?
70	70	?	176	176	?

- a. **Calculate** Copy and complete the table.
- b. **Graph** For each participant, write an ordered pair  $(x, y)$  where  $x$  is the difference of the reported and measured heights and  $y$  is the difference of the reported and measured weights. Then plot the ordered pairs in a coordinate plane.
- c. **CHALLENGE** What does the origin represent in this situation?
- d. **CHALLENGE** Which quadrant has the greatest number of points?  
*Explain* what it means for a point to be in that quadrant.



## MIXED REVIEW FOR TAKS

**TAKS PRACTICE** at classzone.com

### REVIEW

Lesson 3.8;  
TAKS Workbook

42. **TAKS PRACTICE** The volume  $V$  of a cylinder is given by the formula  $V = \pi r^2 h$ . Solve the formula for  $h$ . **TAKS Obj. 2**

(A)  $h = V - \pi r^2$

(B)  $h = \frac{V}{\pi r^2}$

(C)  $h = \frac{V}{\pi r}$

(D)  $h = -\frac{V}{\pi r^2}$

### REVIEW

Extension 3.6;  
TAKS Workbook

43. **TAKS PRACTICE** If  $\triangle ABC$  is similar to  $\triangle DEF$ , what is the length  $x$ ? **TAKS Obj. 8**

(F) 77

(G) 84

(H) 90

(J) 99

