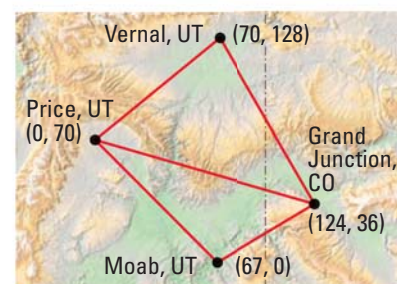


43. **MULTI-STEP PROBLEM** An ice cream shop sells the following sizes of ice cream cones: single scoop for \$.90, double scoop for \$1.20, and triple scoop for \$1.60. One day, a total of 120 cones are sold for \$134, as many single-scoop cones are sold as double-scoop and triple-scoop cones combined.
- Use a linear system and Cramer's rule to find how many of each size of cone are sold.
 - The next day, the shop raises prices by 10%. As a result, the number of each size of cone sold falls by 5%. What is the revenue from cone sales?

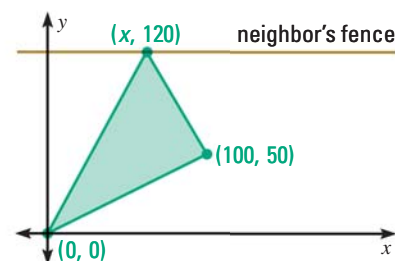
44. **SCIENCE** The atomic weights of three compounds are shown in the table. Use a linear system and Cramer's rule to find the atomic weights of fluorine (F), sodium (Na), and chlorine (Cl).

Compound	Formula	Atomic weight
Sodium fluoride	FNa	42
Sodium chloride	NaCl	58.5
Chlorine pentafluoride	ClF ₅	130.5

45. **TAKS REASONING** In Utah and Colorado, an area called the Dinosaur Diamond is known for containing many dinosaur fossils. The map at the right shows the towns at the four vertices of the diamond. The coordinates given are measured in miles.
- Find the area of the top triangular region.
 - Find the area of the bottom triangular region.
 - What is the total area of the Dinosaur Diamond?
 - Describe another way in which you can divide the Dinosaur Diamond into two triangles in order to find its area.



46. **CHALLENGE** A farmer is fencing off a triangular region of a pasture, as shown. The area of the region should be 5000 square feet. The farmer has planted the first two fence posts at (0, 0) and (100, 50). He wants to plant the final post along his neighbor's fence, which lies on the horizontal line $y = 120$. At which *two* points could the farmer plant the final post so that the triangular region has the desired area?



MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW

Lesson 1.6;
TAKS Workbook

47. **TAKS PRACTICE** Nadia's weekly salary is \$390, and she receives a \$5 bonus for each new customer she brings in. Which inequality represents the number of new customers, c , she needs to bring in per week to earn at least \$450 per week? **TAKS Obj. 4**

(A) $c < 60$ (B) $c < 12$ (C) $c \geq 12$ (D) $c \geq 60$

REVIEW

TAKS Preparation
p. 544;
TAKS Workbook

48. **TAKS PRACTICE** How many edges does the pentagonal prism have? **TAKS Obj. 7**

(F) 7 (G) 10
(H) 15 (J) 17

