Problem of the Week
Problem B
Fields of Flowers

Sadie has garden beds that are 11 m by 14 m. She wants to grow giant sunflowers in one of her garden beds and dwarf sunflowers in another garden bed.

(a) Sadie spaces the giant sunflower seeds 50 cm apart, in rows that are 50 cm apart, leaving a 100 cm border on all sides of the garden bed. How many giant sunflower seeds can she plant in one garden bed?

(b) In another garden bed, Sadie plants dwarf sunflower seeds. She spaces the seeds 25 cm apart, in rows that are 25 cm apart, leaving a 100 cm border on all sides of the garden bed. How many dwarf sunflowers can she plant in this garden bed?

(c) All of Sadie's sunflowers have germinated and matured, but then in a cold early frost one evening, she loses 20% of the giant sunflowers and 10% of the dwarf sunflowers. If Sadie sells all the surviving sunflowers at $5.00 each for the giants and $3.00 each for the dwarfs, which crop will provide the greater income?

THEMES   GEOMETRY & MEASUREMENT, NUMBER SENSE