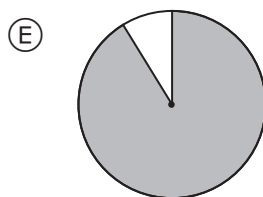
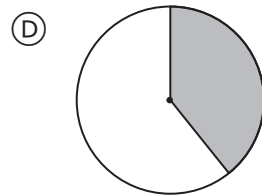
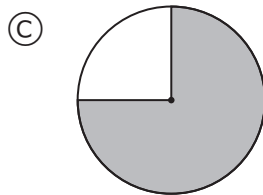
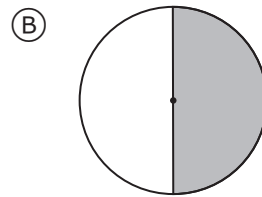
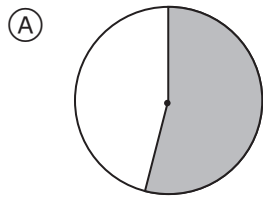


Which circle has approximately the same fraction of its area shaded as the rectangle above?



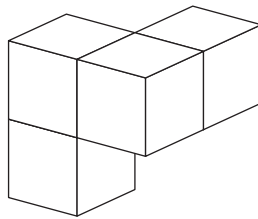
A gardener mixes 4.45 kilograms of rye grass seed with 2.735 kilograms of clover seed to make a mix for sowing a lawn area. How many kilograms of the lawn mix does he now have?

M01_02

Answer: _____

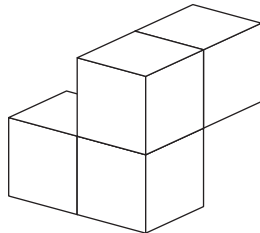
This object will be turned to a different position

M01_03

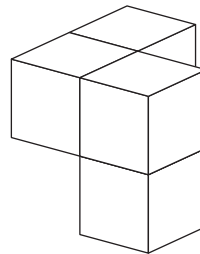


Which of these could be the object after being turned?

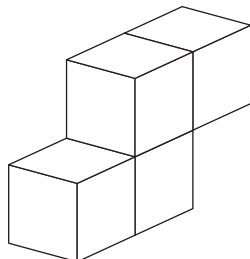
Ⓐ



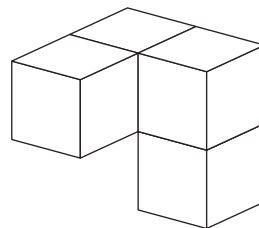
Ⓑ



Ⓒ



Ⓓ



$\frac{x}{3} > 8$ is equivalent to

- (A) $x < 5$
- (B) $x < 24$
- (C) $x > \frac{8}{3}$
- (D) $x > 5$
- (E) $x > 24$

M022050

What is the perimeter of a square whose area is 100 square meters?

Answer: _____

M022055

One year a company reported selling 1426 tons of fertilizer. The following year the company sold 15 percent less fertilizer. Which is the closest approximation to the number of tons of fertilizer sold in the second year?

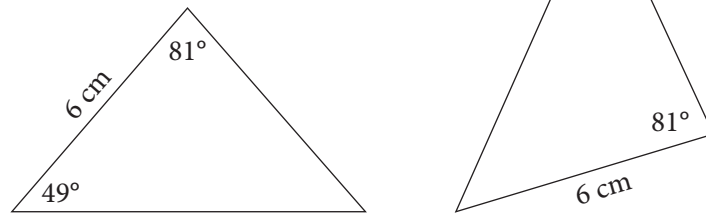
- (A) 200
- (B) 300
- (C) 1200
- (D) 1600
- (E) 1700

M022057

A bowl contains 36 colored beads all of the same size: some blue, some green, some red, and the rest yellow. A bead is drawn from the bowl without looking. The probability that it is blue is $\frac{4}{9}$. How many blue beads are in the bowl?

- (A) 4
- (B) 8
- (C) 16
- (D) 18
- (E) 20

M022257



The triangles shown are congruent. The measures of some of the sides and angles are given. What is the value of x ?

- (A) 49
- (B) 50
- (C) 60
- (D) 70
- (E) 81

$$\frac{2}{5} + \frac{5}{4} + \frac{9}{8} =$$

(A) $\frac{16}{17}$

(B) $\frac{41}{40}$

(C) $\frac{81}{40}$

(D) $\frac{111}{40}$



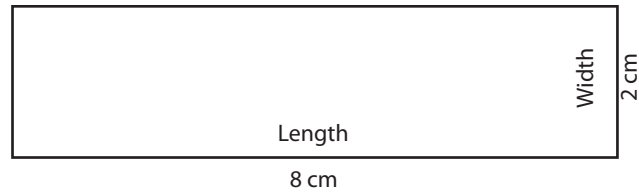
Mariam made a table to keep track of how long it took water in a beaker to cool from 95°C to 70°C . She measured the time it took the water to cool in 5°C intervals.

Interval Readings	Amount of Cooling Time
$95^{\circ}\text{C} - 90^{\circ}\text{C}$	2 minutes 10 seconds
$90^{\circ}\text{C} - 85^{\circ}\text{C}$	3 minutes 19 seconds
$85^{\circ}\text{C} - 80^{\circ}\text{C}$	4 minutes 48 seconds
$80^{\circ}\text{C} - 75^{\circ}\text{C}$	6 minutes 55 seconds
$75^{\circ}\text{C} - 70^{\circ}\text{C}$	9 minutes 43 seconds

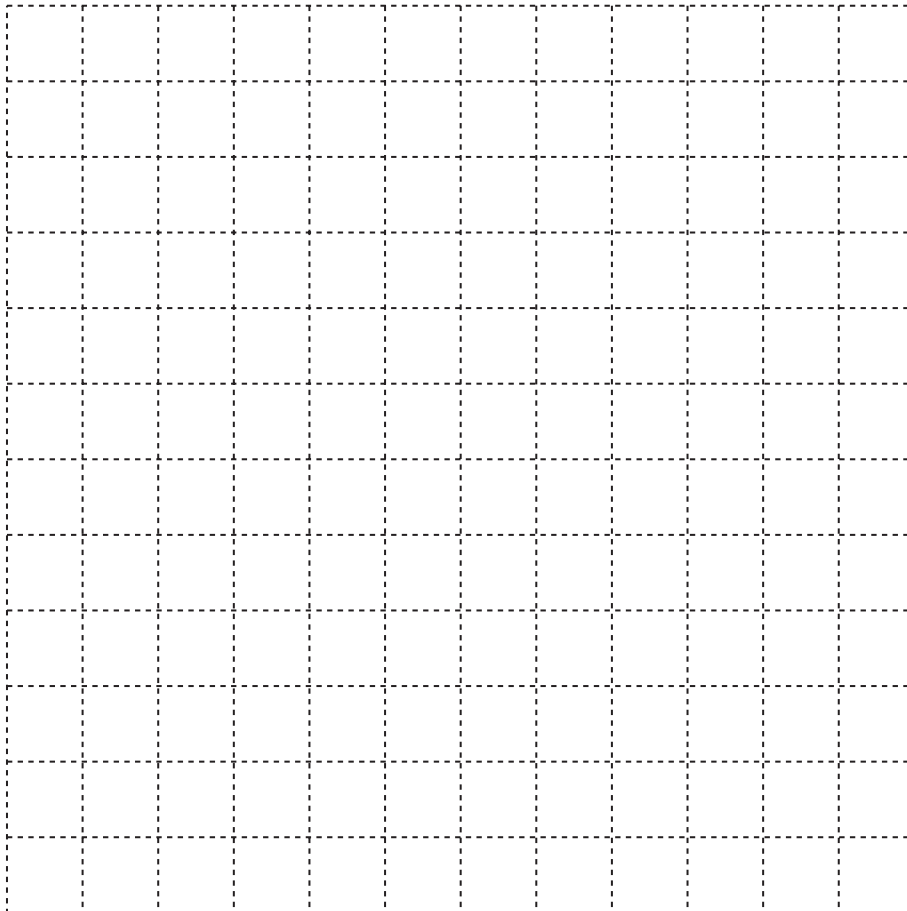
Estimate to the nearest minute the total time taken for the temperature of the water in the beaker to cool from 95°C to 70°C , and explain how your estimate was made.

Estimate: _____

Explain:



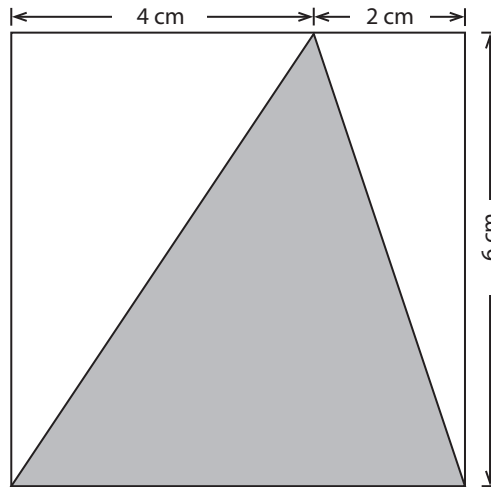
- A. On the grid below, draw a rectangle whose length is three-fourths the length of the rectangle above, and whose width is two and one-half times the width of the rectangle above. Label the length and width of the new rectangle in centimeters on the figure. Each square on the grid is 1 cm by 1 cm.



- B. What is the ratio of the area of the original rectangle to the area of the new one?



The figure shows a shaded triangle inside a square.



What is the area of the shaded triangle?

Answer: _____