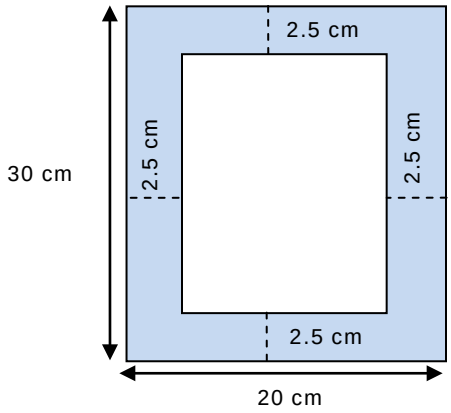
Area and Perimeter Critical Thinking Problems – Try the Skill

Name _____ Date _____

Find the area of the frame (the shaded part). All lines meet at right angles.



As the angles meet at right angle, so the figure must be a square or rectangle. Now as length and height measures are unequal it is a rectangle, area can be calculated from length X width.

To find the area of the frame we subtract the area of smaller (inner) rectangle from area of larger rectangle.

Area of larger rectangle = 30 cm X 20 cm = 600 cm^2

The longer side of inner rectangle = 30 cm – (2.5 cm + 2.5 cm) =25 cm

The shorter side of inner rectangle = 20 – (2.5 cm + 2.5 cm) = 15 cm

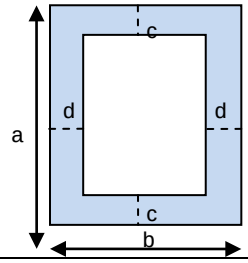
Now that we have both sides of inner rectangle, thus area of smaller rectangle = 15 cm X 25 cm = 375 cm^2

Area of shaded region = 600 cm^2 - 375 cm^2 = 225 cm^2

Answer: 225 cm^2

Practice problems

Find area of shaded region.

	1	a =13 in b = 5.5 in c = d = 1 in
	2	a = 15 in b = 7 in c = d = 2.5 in