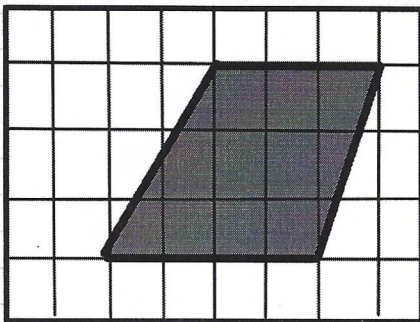


Complete numbers 3 and 4 on your notes page.

What is the area of the trapezoid?

3)



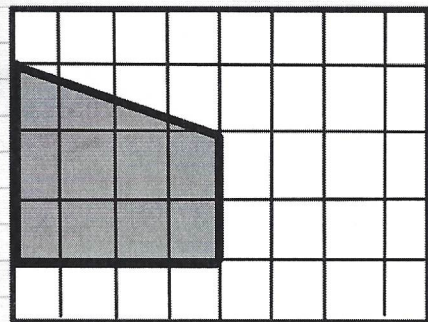
$$A = \frac{1}{2} h(b_1 + b_2)$$

$$\frac{1}{2} \cdot 3(3 + 4)$$

$$\frac{1}{2} \cdot 3(7)$$

$$A = 10.5 \text{ un}^2$$

4)



$$A = \frac{1}{2} h(b_1 + b_2)$$

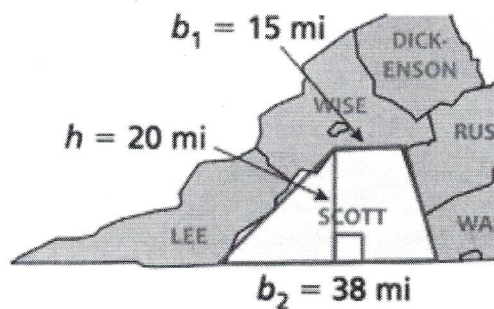
$$\frac{1}{2} \cdot 4(2 + 3)$$

$$\frac{1}{2} \cdot 4(5)$$

$$A = 10 \text{ un}^2$$

Complete numbers 5 - 8 in your composition book.

- 5) You can use a trapezoid to approximate the shape of Scott County, Virginia. The population is about 23,200. About how many people are there per square mile?



$$A = \frac{1}{2}h(b_1 + b_2) \qquad \frac{23,200 \text{ people}}{530 \text{ mi.}^2} =$$
$$\frac{1}{2} \cdot 20(15 + 38)$$

$$\frac{1}{2} \cdot 20(53)$$

$$530 \text{ mi.}^2$$

about 44 people
per square mile

Find the area of each trapezoid.

6) $h = 8$ in.
 $b_1 = 3$ in.
 $b_2 = 7$ in.

$$A = \frac{1}{2}h(b_1 + b_2)$$

$$\frac{1}{2} \cdot 8(3 + 7)$$

$$\frac{1}{2} \cdot 8(10)$$

$$A = 40 \text{ in.}^2$$

7) $h = 15$ in.
 $b_1 = 6$ in.
 $b_2 = 9$ in.

$$A = \frac{1}{2}h(b_1 + b_2)$$

$$\frac{1}{2} \cdot 15(6 + 9)$$

$$\frac{1}{2} \cdot 15(15)$$

$$A = 112.5 \text{ in.}^2$$

8) $h = 12.4$ in.
 $b_1 = 7.3$ in.
 $b_2 = 2.8$ in.

$$A = \frac{1}{2}h(b_1 + b_2)$$

$$\frac{1}{2} \cdot 12.4(7.3 + 2.8)$$

$$\frac{1}{2} \cdot 12.4(10.1)$$

$$A = 62.62 \text{ in.}^2$$

Complete numbers 5 and 6 on your notes page.

$$\begin{aligned} 5) \quad h &= 5 \text{ in.} \\ b_1 &= 8 \text{ in.} \\ b_2 &= 3 \text{ in.} \end{aligned}$$

$$A = \frac{1}{2}h(b_1 + b_2)$$

$$\frac{1}{2} \cdot 5(8 + 3)$$

$$\frac{1}{2} \cdot 5(11)$$

$$A = 27.5 \text{ in.}^2$$

$$\begin{aligned} 6) \quad h &= 7.8 \text{ in.} \\ b_1 &= 4.5 \text{ in.} \\ b_2 &= 3.9 \text{ in.} \end{aligned}$$

$$A = \frac{1}{2}h(b_1 + b_2)$$

$$\frac{1}{2} \cdot 7.8(4.5 + 3.9)$$

$$\frac{1}{2} \cdot 7.8(8.4)$$

$$A = 32.76 \text{ in.}^2$$