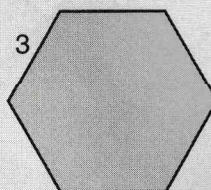We can quickly find the perimeter of a regular polygon by multiplying!

EXAMPLE | Find the perimeter of this regular hexagon.
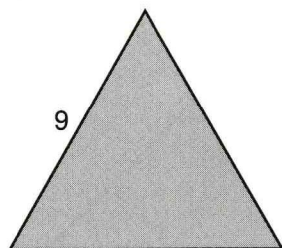
The hexagon has 6 sides of length 3.
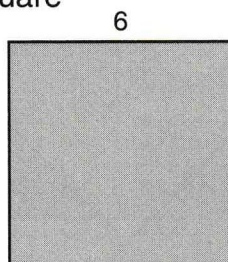The perimeter of the hexagon is $6 \times 3 = \mathbf{18}$.

PRACTICE | Find the perimeter of each polygon below.
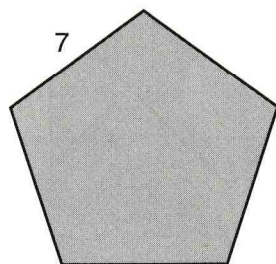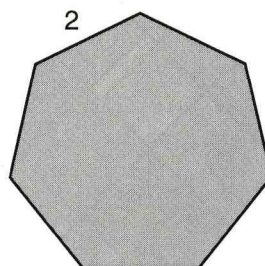
41. Equilateral Triangle

9

42. Square

6

43. Regular Pentagon

7

44. Regular Heptagon

2

45. What is the perimeter of a regular octagon with sides of length 6?

41. _____

42. _____

43. _____

44. _____

45. _____
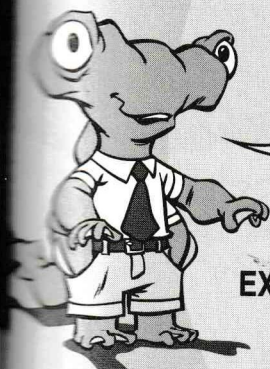
Multiplication also makes it easier to find the area of a rectangle!

We can multiply the height and width of a rectangle to find its area.
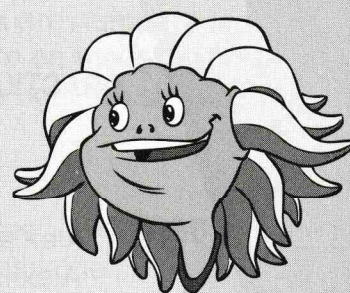
EXAMPLE | Find the area of the rectangle below.

8

3
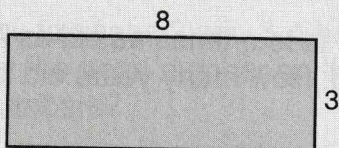
The area of a rectangle with height 3 and width 8 is

$3 \times 8 = $ **24 squares**.

PRACTICE | Find the area of each rectangle below.

46.

5

9

47.

7

6

46. _____

47. _____

48.

10

4

49.

9

8
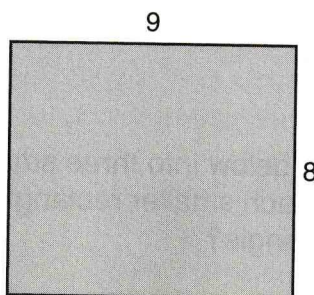
48. _____

49. _____

50. What is the area of a rectangle with height 7 and width 3?

50. _____

PRACTICE | Answer each word problem below.

51. Alex's cousin Axel is four times as old as Alex. Alex is 8 years old. How many years old is Axel?

51. _____

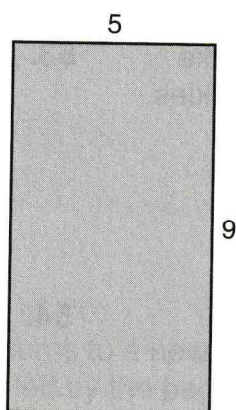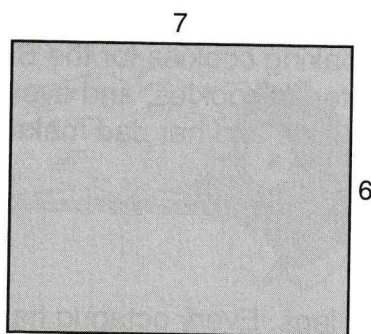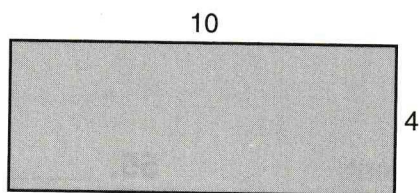**52.** Winnie organizes part of her sticker collection in a binder. Her binder has nine pages, and she places eight stickers on each page. How many stickers does Winnie have in her binder?

52. _____

53. Lizzie and her dad are baking cookies for the Beast Academy bake sale. Each makes 5 plates of cookies, and every plate has 6 cookies. How many cookies do Lizzie and her dad make all together?

53. _____

54. Every hexatoad has six legs. Every octapug has eight legs. How many legs do 5 hexatoads and 3 octapugs have all together?

54. _____

55. Grogg cuts the rectangle below into three smaller, congruent rectangles. The area of each smaller rectangle is 8 squares. What is the area of the large rectangle?

55. _____

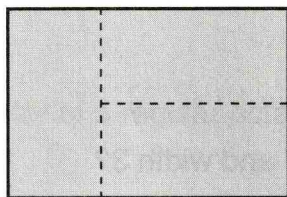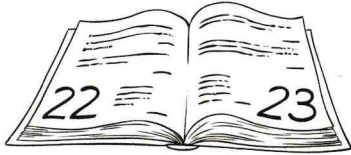The pages of Lizzie's math book are numbered in order. Even-numbered pages are on the left, and odd-numbered pages are on the right, as shown.

56. Lizzie opens her math book to pages 2 and 3. She multiplies the page number on the left by the page number on the right. What is the product of the two page numbers?

56. _____
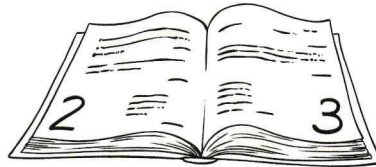
57. Lizzie turns to another page and multiplies the page number on the left by the page number on the right. The page number on the left is 6. What is the product of the two page numbers?

57. _____
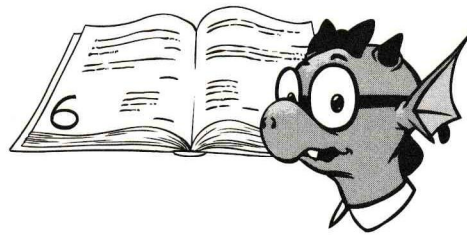
58. Lizzie turns to a new page and multiplies the page number on the left by the page number on the right. The product of the page numbers is 72. What are the page numbers?

58. _____ and _____

59. In Lizzie's book, the even-numbered pages are on the left, and the odd-numbered pages are on the right. Is it possible for the product of two facing page numbers in Lizzie's book to be 56? Why or why not?

60. Grogg cuts the large rectangle below into five smaller, congruent rectangles. The short side of the shaded rectangle has length 2. What is the area of the large rectangle?
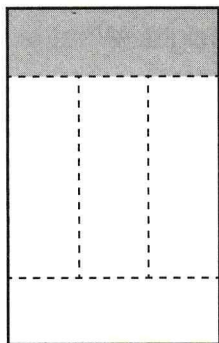
60. _____

61. Eight white 2 by 3 rectangles are arranged as shown. What is the area of the shaded square they surround?
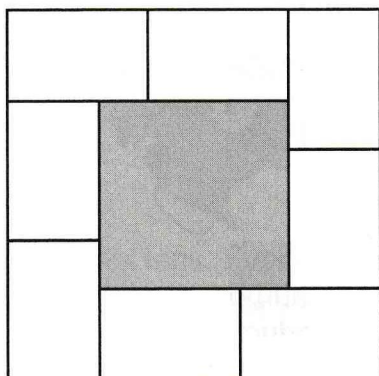
61. _____

62. Winnie has a bag of jellybeans with two flavors: cherry and coconut. There are four times as many cherry jellybeans as there are coconut jellybeans. Winnie has a total of 45 jellybeans. How many of her jellybeans are coconut flavored?

62. _____

You'll need to use multiplication, addition, and subtraction to complete these cross-number puzzles!

EXAMPLE | Complete the cross-number puzzle below.

	×	4	=	24
×	■	×	■	−
2	×	2	=	
=	■	=	■	=
	+		=	

Across:
$6 \times 4 = 24$.
$2 \times 2 = 4$.

Down:
$6 \times 2 = 12$.
$4 \times 2 = 8$.

$12 + 8 = 20$ and $24 - 4 = 20$.

The completed cross-number puzzle looks like this:

6	×	4	=	24
×	■	×	■	−
2	×	2	=	4
=	■	=	■	=
12	+	8	=	20

PRACTICE | Complete each cross-number puzzle below.

63.

6	×	10	=	
×	■	×	■	−
2	×	4	=	
=	■	=	■	=
	+		=	

64.

7	×	4	=	
×	■	×	■	+
10	×	3	=	
=	■	=	■	=
	−		=	

65.

3	×	2	=	
×	■	×	■	−
1	×	1	=	
=	■	=	■	=
	+		=	

66.

3	×	5	=	
×	■	×	■	−
1	×	2	=	
=	■	=	■	=
	+		=	

67.

5	×	7	=	
×		×		−
3	×	2	=	
=		=		=
	+		=	

68.

4	×	5	=	
×		×		−
3	×	1	=	
=		=		=
	+		=	

69.

3	×		=	12
×		×		+
9	×	3	=	
=		=		=
	+		=	

70.

4	×	1	=	
×		×		+
7	×		=	21
=		=		=
	−		=	

71.

9	×		=	72
×		×		−
	×	7	=	
=		=		=
9	+		=	65

72.

	×	4	=	
×		×		+
8	×		=	16
=		=		=
48	−		=	

73

75

77
★