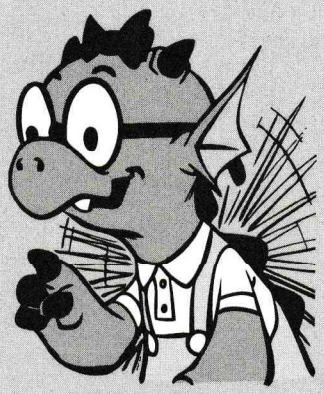
Use the distributive property to rewrite each expression below. Then, distribute to find the product.



EXAMPLE | 6×27

$27 = 20+7$, so $6\times27 = 6\times(20+7)$.

To find the product, we ***distribute*** the 6.

$6\times(20+7) = 6\times20+6\times7 = 120+42 = 162.$

$6\times27 = \boxed{6}\times(\boxed{20}+\boxed{7}) = \boxed{6}\times\boxed{20}+\boxed{6}\times\boxed{7} = \boxed{120}+\boxed{42} = \boxed{162}$

PRACTICE | Use the distributive property to rewrite each expression below. Then, distribute to find the product.

48. $7\times43 = \square\times(\square+\square) = \square\times\square+\square\times\square = \square+\square = \square$

49. $4\times21 = \square\times(\square+\square) = \square\times\square+\square\times\square = \square+\square = \square$

50. $3\times88 = \square\times(\square+\square) = \square\times\square+\square\times\square = \square+\square = \square$

PRACTICE | Find each product below.

51. 8×29 **51.** _____

52. 7×42 **52.** _____

53. 6×123 **53.** _____
★

THE DISTRIBUTIVE PROPERTY

Distributing

EXAMPLE | Use the distributive property to rewrite the expression below. Then, distribute to find the product.

$21\times4=(\square+\square)\times\square=\square\times\square+\square\times\square=\square+\square=\square$

$21=20+1$, so $21\times4=(20+1)\times4$.

To find the product, we ***distribute*** the 4.

$(20+1)\times4=20\times4+1\times4=80+4=84.$

$21\times4=(\boxed{20}+\boxed{1})\times\boxed{4}=\boxed{20}\times\boxed{4}+\boxed{1}\times\boxed{4}=\boxed{80}+\boxed{4}=\boxed{84}$

PRACTICE | Use the distributive property to rewrite each expression below. Then, distribute to find the product.

54. $13\times4=(\square+\square)\times\square=\square\times\square+\square\times\square=\square+\square=\square$

55. $36\times5=(\square+\square)\times\square=\square\times\square+\square\times\square=\square+\square=\square$

56. $55\times7=(\square+\square)\times\square=\square\times\square+\square\times\square=\square+\square=\square$

PRACTICE | Find the products below.

57. 19×6 **57.** _____

58. 63×5 **58.** _____

59. ★ 234×7 **59.** _____

EXAMPLE | Use the distributive property to rewrite the expression below. Then, evaluate.

$24\times5-4\times5=(\square-\square)\times\square=\square\times\square=\square$

We can write $24\times5-4\times5$ as $(24-4)\times5$.
$(24-4)\times5$ is the same as $20\times5=100$.

$24\times5-4\times5=(\boxed{24}-\boxed{4})\times\boxed{5}=\boxed{20}\times\boxed{5}=\boxed{100}$

PRACTICE | Use the distributive property to rewrite each expression below. Then, evaluate.

60. $15\times6+5\times6=(\square+\square)\times\square=\square\times\square=\square$

61. $7\times22-7\times12=\square\times(\square-\square)=\square\times\square=\square$

PRACTICE | Evaluate each expression below.

62. $13\times9+13\times1$ **62.** _____

63. $8\times23-8\times3$ **63.** _____

64. ★ $3\times59+3\times9+3\times2$ **64.** _____

65. ★ $66\times26+24\times26+10\times26$ **65.** _____

EXAMPLE | Evaluate the expression below.

$18\times3+3\times2$

Multiplication is commutative, so $18\times3+3\times2$ is the same as $18\times3+2\times3$.

We can write $18\times3+2\times3$ as $(18+2)\times3$.

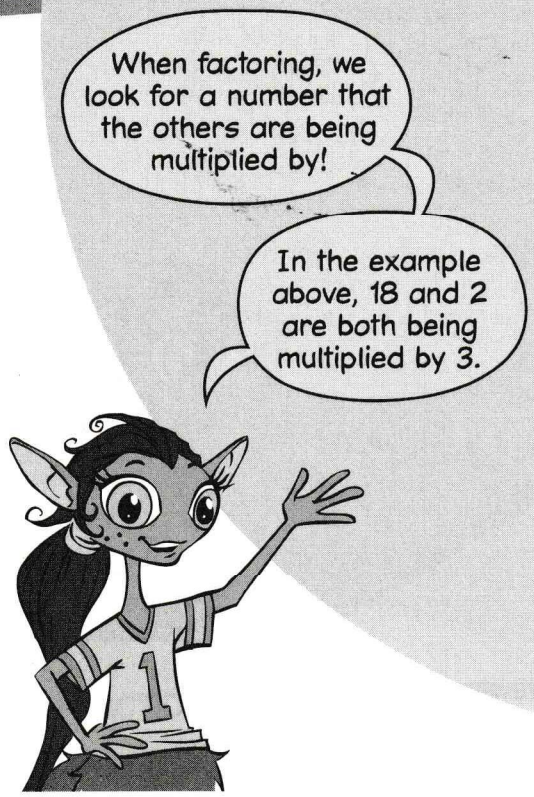
$18+2=20$, so $(18+2)\times3=20\times3=\mathbf{60}$.

— ***or*** —

Multiplication is commutative, so $18\times3+3\times2$ is the same as $3\times18+3\times2$.

We can write $3\times18+3\times2$ as $3\times(18+2)$.

$18+2=20$, so $3\times(18+2)=3\times20=\mathbf{60}$.



PRACTICE | Use the distributive property to evaluate each expression below.

66. $35\times4+4\times65$ **66.** _____

67. $74\times3+3\times6$ **67.** _____

68. $8\times14+26\times8$ **68.** _____

69. $79\times6-6\times19$ **69.** _____

70. ★ $65\times3+3\times12+12\times3+3\times11$ **70.** _____

71. ★ $14\times97+2\times14$ **71.** _____

72. ★★ $34\times7-7\times8+6\times7-7\times3$ **72.** _____

Alex has four types of coins in his collection: quarters, dimes, nickels, and pennies.

- A quarter is worth 25 cents.
- A dime is worth 10 cents.
- A nickel is worth 5 cents.
- A penny is worth 1 cent.

PRACTICE | Find the value in cents of each set of coins listed below.

73. 92 nickels **73.** _____

74. 19 quarters and 25 pennies **74.** _____

75. 25 nickels and 20 quarters **75.** _____

76. 5 quarters and 15 nickels **76.** _____

77. ★ 19 quarters, 25 dimes, and 25 pennies **77.** _____

78. ★ 7 quarters, 7 dimes, 7 nickels, and 7 pennies **78.** _____

79. ★ 39 quarters, 25 pennies, 10 nickels, and 15 dimes. **79.** _____

In the game of Beastball, points are scored as shown:

	Points Scored
1 **Bonk**	13
1 **Warble**	7
1 **Zip**	4

PRACTICE | Solve each problem below to find the number of points each team scored.

80. The Reptosaurs scored 23 zips. How many points is this? **80.** _____

81. The Woolies scored 13 warbles. How many points is this? **81.** _____

82. The Hydras scored 20 bonks. How many points is this? **82.** _____

83. The Growlers scored 12 bonks and 12 warbles.
How many points did the Growlers score? **83.** _____

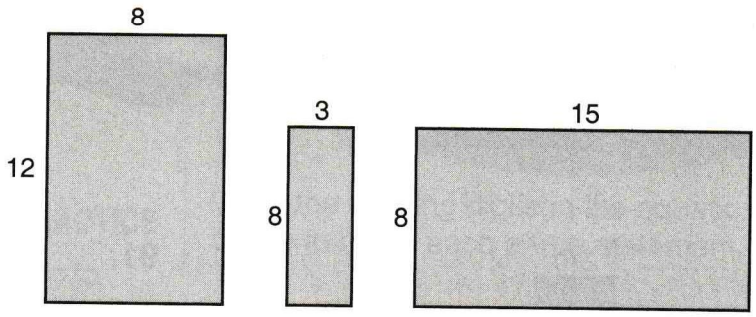
84. The Koombas scored 7 zips and 16 warbles.
How many points did the Koombas score? **84.** _____

85. The Yetis scored 4 bonks, 4 warbles, and 9 zips.
How many points did the Yetis score? **85.** _____

86. The Little Monsters scored 3 bonks and 13 warbles.
The Bots scored 23 zips and 4 warbles.
Which team scored more points? **86.** _____

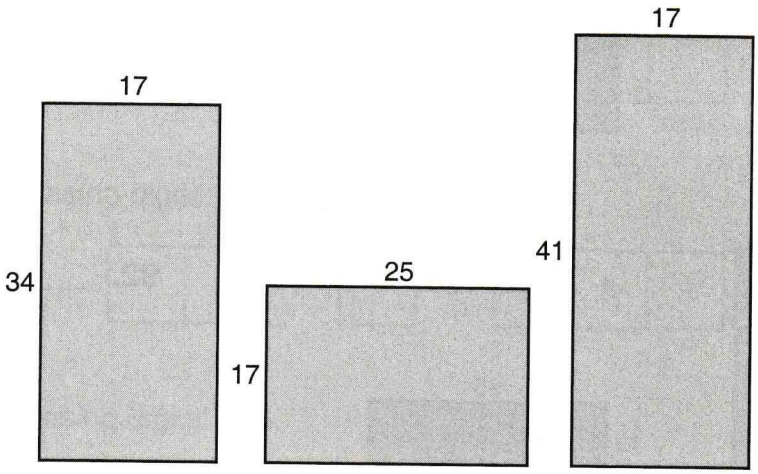
PRACTICE | Find the total area of the rectangles in each group.

87.



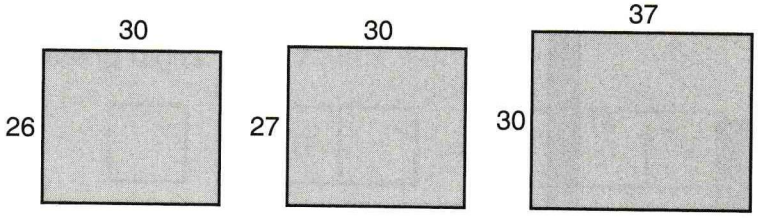
87. _____

88.



88. _____

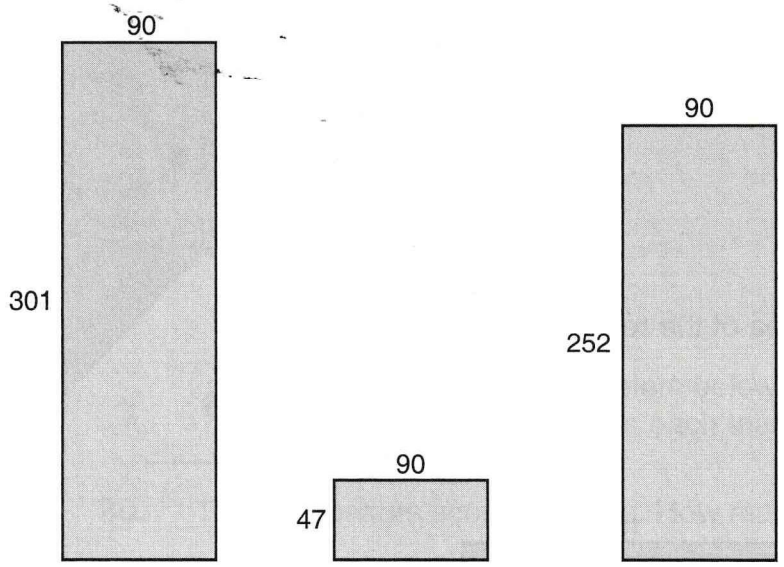
89.



89. _____

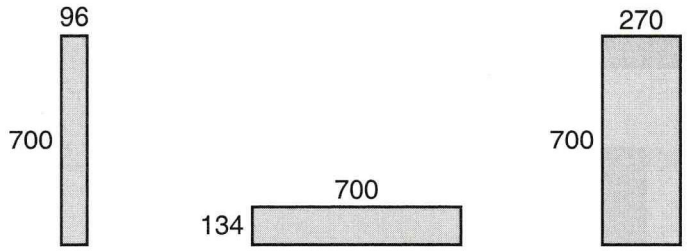
PRACTICE | Find the total area of the rectangles in each group.

90.



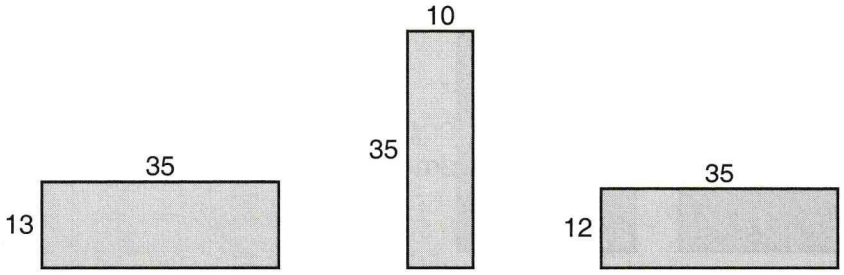
90. _____

91.



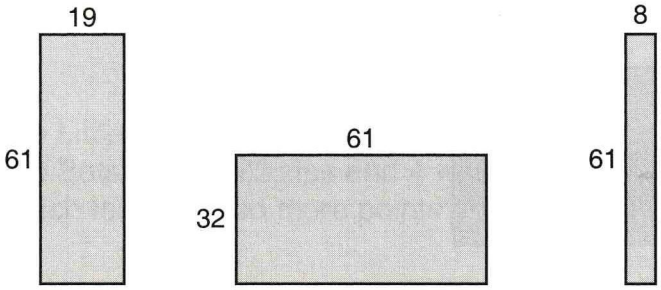
91. _____

92. ★



92. _____

93. ★



93. _____