U5 L5 Wkslt

NAME
Blk

## Practice

*Solve.*

**1.** $2(x + 1) = 4$
**2.** $2(x - 3) = 2$
**3.** $3(x + 1) = 6$
**4.** $2(x + 3) = -6$
**5.** $3(x + 2) = -9$
**6.** $2(x + 5) = -4$

*Solve and check.*

**7.** $2(3x + 4) = 14$
**8.** $14 = 2(3x - 2)$
**9.** $3(x + 5) = 18$
**10.** $3(2x + 3) = -3$
**11.** $-24 = 4(x + 3)$
**12.** $5(2x + 3) = -15$

*Solve.*

**13.** $2(x + 3) - 3 = 8 - 3x$
**14.** $3(x + 1) + 10 = 8 - 2x$
**15.** $8 - 3x = 4(x - 3) + 6$
**16.** $5(2x - 3) + 6 = -35 - 3x$

*Solve.*

**17.** $5(2x - 3) = 2(-3x - 2) + 5$
**18.** $2(5x - 6) = (3x - 2) + 4$
**19.** $3(5y + 4) = 5(2y - 3) + 22$
**20.** $2(8n + 7) = -50 + 2(-5n + 6)$
**21.** $5(2x - 3) = 2(3x + 7) + 11$

*Solve and check.*

**22.** $2(x - 3) + (x + 3) = 6x$
**23.** $5(x + 4) - (x + 2) = 8x + 2$
**24.** $4(m - 2) - (m + 3) = m - 1$
**25.** $4(n - 7) - 2(n + 3) = -15n$
**26.** $4(y + 2) - 5(y + 1) = y - 1$

*Solve.*

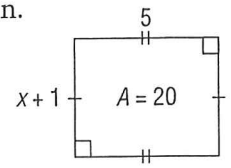
**27.** $3(2x + 1) - (x - 2) = 2(3x + 4)$
**28.** $12(2s - 1) - 4(-2s - 1) = 2(s + 11)$
**29.** $2(x - 8) - (x - 4) = 3(x + 5) + 3$
**30.** $7(2x - 1) - 2(5x - 6) = 2(4x - 5) + 7$
**31.** $3(4n - 1) = 4(-n + 9) - 7$

## Problems and Applications

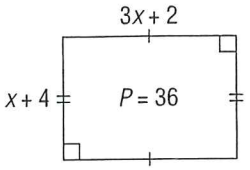
**32.** The equation $5(x + 1) = 20$ represents the area of the following rectangle.

**a)** Solve the equation.

**b)** Find the rectangle's width.




**33.** The equation $2(3x + 2) + 2(x + 4) = 36$ represents the perimeter of the rectangle shown below.




**a)** Solve the equation.

**b)** Calculate the rectangle's dimensions.

**34.** The Pacific Ocean accounts for 46% of the area of the water on the Earth's surface. If we take the percent that the Atlantic Ocean accounts for, subtract 1, and double the difference, the result is the percent that the Pacific Ocean accounts for. Solve the equation $2(x - 1) = 46$ to find the percent that the Atlantic Ocean accounts for.

**35.** Write an equation that has 1 bracketed expression on its left side and 1 bracketed expression plus a number on its right side. The equation should have a solution of $x = -2$. Have a classmate solve your equation.

## WORD POWER

Change the word BARN to the word DOOR by changing one letter at a time. You must form a real word each time you change a letter. The best solution has the fewest steps.