Name KEY Date _____

7.2 Practice A

Tell whether the given value is a solution of the equation.

1. $x + 16 = 20; x = 4$ yes
2. $p - 4 = 28; p = 32$ yes
3. $4w = 44; w = 10$ no
4. $\frac{y}{6} = 6; y = 24$ no

Solve the equation. Check your solution.

5. $x - 5 = 9$ $x = 14$
6. $y - 12 = 0$ $y = 12$
7. $q + 8 = 25$ $q = 17$
8. $f - 22 = 14$ $f = 36$
9. $8 + s = 10$ $s = 2$
10. $r - 3.2 = 1.7$ $r = 4.9$
11. $8.9 = v + 7.3$ $v = 1.6$
12. $\frac{1}{3} + n = \frac{2}{3}$ $n = \frac{1}{3}$
13. $\frac{2}{3} = \frac{1}{4} + g$ $g = \frac{5}{12}$

Describe and correct the error in solving the equation.

14. ✗
$$13 + m = 56$$
$$-13 \qquad -13$$
$$m = 69$$
Use inverse operation
$m = 43$

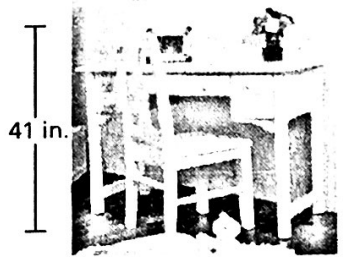
15. ✗
$$27 = n - 15$$
$$-15 \qquad +15$$
$$12 = n$$
Perform same operation to both sides
$n = 42$

Write the word sentence as an equation. Then solve the equation.

16. 20 equals 8 more than a number y.
$20 = 8 + y$ $y = 12$
17. The sum of a number x and 12 equals 15.
$x + 12 = 15$ $x = 3$
18. 4 less than a number g equals 9.
$g - 4 = 9$ $g = 13$
19. A number w decreased by 10 is 3.
$w - 10 = 3$ $w = 13$
20. The height of a desk is 11 inches shorter than the height of a chair. Write and solve an equation to find the height of the desk.

$x + 11 = 41$

$x = 30$ in



21. The Florida Panther has an average height of 30 inches. It is 20 inches taller than the Northern Mockingbird. Write and solve an equation to find the average height of the Northern Mockingbird.
$h + 20 = 30$
$h = 10$ in.
22. The advertised price of a cell phone is \$149 after a \$50 mail-in rebate. Write and solve an equation to find the price of the cell phone before the rebate is applied.
$x - 50 = 149$
$x = \$199$