| MAT $0024 C$ | Name: |
| :--- | :--- |
| Practice for the Exam | Date: |
| Chapter 2 (V1) | Section: |
| Carson |  |

Solve each equation:

$$
\text { 1. }-7 y-6+9 y=6
$$

2. $4 x-5=3 x+17$
3. $7(7 x+5)=6(8 x+3)$
4. $2(x-3)+7 x=12$
5. $12 x-7-11 x=6+(-3)$
6. $3(y+5)=8 y$
7. $3(5 x-7)=2(7 x-3)$
8. $9+2(7 x-4)=-27$
9. $\frac{2}{3}(x-4)-3=\frac{x}{2}-4$
10. $\frac{3 x}{5}-4=\frac{x}{3}+\frac{3}{5}$
11. $5-4(x+3)-2(2 x-1)=4 x+8$
12. $3(x-4)=3 x-10$
13. $4(x+6)=4 x+24$
14. $\frac{5}{2} x-6=\frac{1}{7}(x+3)+1$

Write each as an equation, using " $x$ " for a number: (Do not solve!)
15. The sum of four times a number and twelve is thirty four.
16. Three times the difference between a number and eight is equal to the quotient of the number and four.
17. The sum of three consecutive odd integers is 105 . Find the integers.
18. Let $\mathrm{V}=2 \pi \mathrm{rh}+2 \pi \mathrm{r}^{2}$
a) Solve for $h$
b) Find $V$ when $r=1$ and $h=3$
19. Let $3 x+2 y=6$
a) Solve for $y$
b) Find $y$ when $x=4$
20. Solve $P=2 L+2 W$ for $L$
21. Solve $C=4 x y+y d-3 k$ for $d$

Solve and graph (on a number line) each of the following: Write your answer in interval notation.
22. $4(x+1) \leq 8 x-8-4$
23. $10<5 x+5<20$
24. $(6 x-2)-2(4 x+1) \geq 0$
25. $6 x+5 \leq-7$

