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## State the domain and range for each graph and tell if the graph is a function (write yes or no).

1. Domain $\qquad$
Range $\qquad$
Function? $\qquad$

2. Domain $\qquad$
Range $\qquad$
Function? $\qquad$

3. Domain

Range $\qquad$
Function? $\qquad$

2. Domain $\qquad$
$\qquad$
Function? $\qquad$

5. Domain $\qquad$

Range $\qquad$
Function? $\qquad$

8. Domain $\qquad$
Range $\qquad$
Function? $\qquad$

3. Domain $\qquad$
Range $\qquad$
Function? $\qquad$

6. Domain $\qquad$
Range $\qquad$
Function? $\qquad$

9. Domain $\qquad$
Range $\qquad$
Function? $\qquad$

10. Find the domain and range for the following relation. Is it a function?
$\{(-3,-7),(-1,-3),(0,-1),(2,3),(4,7)\}$
Domain $\qquad$ Range $\qquad$ Function? $\qquad$

Simplify by distributing and collecting like terms. Show your work.
11. $3(4 x+6)+7 x=$
12. $6 m+3(2 m+5)+7=$
13. $7(2+3 x)+8=$
14. $5(m+9)-4+8 m=$

Find the range of the function for the given domain.
15. $y=-3 x+1 ;\{-2,-1,0\}$

Translate each of the following into an equation.
16. The product of 9 and " $m$ " is 45 .
17. The quotient of " $y$ " and 3 is 25 .
18. One-fifth of " r " is 15 .
19. Six less than 2 times " $y$ " is 34 .
20. The difference of " $p$ " and 7 is 30 .
21. The sum of $3 y$ and 5 is 47 .
22. The 3 times the quantity of 5 plus x is 7 .

Match the vocabulary to the correct definition. Write the answer in the blank.
$\qquad$ 23. Algebraic Expression
24. Coefficient
25. Constant
26. Term
27. Variable
A. Each part of an expression separated by an operation
B. A number that stands by itself
C. A number that does not stand by itself. It is attached to the variable.
D. A letter that stands for a particular numerical value
E. A number sentence without an equal sign, has at least one two terms and one operation

Identify each part of the algebraic expression as the coefficient, constant, or variable.
28. $4 \mathrm{x}-12$

4 is $a(n)$ $\qquad$
x is $\mathrm{a}(\mathrm{n})$ 12 is $a(n)$
29. $a+3 b$
$a$ is $a(n)$
3 is $a(n)$ $\qquad$
$b$ is $a(n)$ $\qquad$

