## Q.ulzizz

Alg 2 Unit 1 Review
42 Questions

NAME : $\qquad$
CLASS : $\qquad$
DATE : $\qquad$
1.
a) Graph 1c) Graph 3
2.
a) Function
3.
a) Functionb) Not a Function
4.


Is the relation a function? Why.a) Yes, because the $x$-value 11 has two $y$-values $\square$ pair with it.
b) Yes, because each $x$-value has only one $y$ value paired with it.c) No, because the $x$-value 11 has two $y$-values pair with it.
d) No, because each $x$-value has only one $y$ value paired with it.
5. How would you say $h(n)$a) $n$ of $h$b) $h$ of $n$
6. Evaluate $f(-2)$ if $f(x)=x^{2}+3$a) -1b) 1c) 7d) -7
7. If $f(x)=-4 x-5$ and
$g(x)=3-x$,
what is $g(-4)+f(1)$ ?a) 7b) -2c) -9d) -10
8. All of the $y$ values or outputs are called what?a) Domainb) Range
9.


What is the range of the graph?
Remember: Range is $y$ !a) $1 \leq x \leq 5$b) $1<x<5$c) $1 \leq y \leq 5$d) $1<y<5$
10.
a) $1 \leq x \leq 4$c) $1 \leq y \leq 4$
11.
a) $-7 \leq x<5$c) $-3 \leq y<1$
12.


What is the domain of the graph?
Remember: Domain is $x$

What is the domain of the graph?
Remember: Domain is the " $x$ " values from left to right

## What is the RANGE?

a) $\{-3,3]$b) all real numbersc) $[-4,5]$d) $[-4, \infty)$13. 



What is the range of the function?a) $[-1,+\infty)$c) $[1.5,+\infty)$
14.
a) $(4, \infty)$c) $[-3,3)$
15.
a) $(-\infty, 0)$c) All real numbers

What is the DOMAIN?b) $(-4, \infty)$d) $(-3,3]$

What is the RANGE?
16.
a) $(-3,4)$b) $[-3,4]$c) $(-1,4)$
17. $6 x-7=12$a) $5 / 6$c) 2
18. $\frac{n+5}{3}-6=-4$a) 25b) 11c) 35
19. $-3(2 c-5)=15$a) -5c) 0
20. $4 y-7=2 y+7$a) 7c) 2
21. $2 x+4+5 x=13+4 x$a) -3c) 3
22.

$$
\frac{3}{4} x+\frac{2}{5}=x-\frac{7}{10}
$$a) $22 / 5$b) $5 / 22$c) $22 / 15$d) $11 / 4$

23. Brian and Amy invest $\$ 2700$ to start a hair cutting business.

Each hair cut costs them $\$ 1.50$ (supplies). They charge their customer \$15 for each cut.
How many hair cuts until they breakeven?a) 200 hair cuts
$\square$ b) 22 hair cutsc) 2700 hair cuts
d) 15
24. A teacher bought 12 packets of crayons. Seven of the packets had 9 crayons and the other five packets had 10 crayons How many crayons did the teacher buy in all?
a) 113
b) 50c) 63
d) 120

A toy company spends $\$ 1500$ per day for factory expenses
25. plus $\$ 8$ to make each teddy bear. They sell the teddy bears for $\$ 12$ a piece. Which equation could be used to find the number of bears $t$ the company has to sell in one day to equal its daily cost?a) $1500+8 t=12$b) $12+8 t=1500$c) $1500+8 t=12 t$d) $8 t=12 t+1500$
26. WRITE AN EQUATION

For a field trip 4 students rode in cars and the rest filled nine buses. How many students were in each bus if 472 students were on the trip?a) $4 x=472$
b) $9 x=472$c) $4+9 x=472$d) $4+x=472$
27. Maria has 25 dollars. She has to buy a gallon of milk which costs $\$ 3.50$. She wants to spend the rest of her money on cereal. If each box of cereal costs $\$ 4.50$, how many can she purchase?a) 4 boxesb) 5 boxesc) 6 boxesd) 7 boxes
28. $-3+x \leq-11$a) $x \leq-8$b) $x \leq 8$c) $x \geq-8$
d) $x \geq 8$
29. $2 x<-3 x+15$a) $x>3$
b) $x>15$c) $x<3$
d) $x<15$
30. An absolute value inequality isa) an inequality that contains an absolute valueb) impossible to solve expressionc) an equation that contains an absolute valued) always going to have two solutions expression
31. $|2 x+12|<8$

Which is the correct first step?
a) $2 x+12<8$ and $2 x+12>-8$
b) $2 x+12<8$ or $2 x+12>-8$c) $2 x+12<8$ and $2 x+12<-8$
$\square$ d) $2 \mathrm{x}+12<8$ or $2 \mathrm{x}+12>-8$
32. Which compound inequality involves <, $\leq$ when solving absolute value inequalities?
$\square$ a) and
33. $|x-6|<4$ Is this an "and" or an "or" problem?a) and
b) $o r$
34.


What kind of compound inequality is this?a) AND compound inequality
b) OR compound inequality
35. $|x+1| \geq 3$a) No Solutionc) $x \leq-4$ or $x \geq 2$b) All Real Numbersd) $-4 \leq x \leq 2$
36. $|x+3|>8$a) No Solutionb) All Real Numbersc) $x<-11$ or $x>5$d) $-5<x<11$
37. $|2 w-1|<11$a) No Solutionb) All Real Numbersc) $-5<w<6$
d) $-6<w<5$
38. When you graph an inequality, you used a closed dot when you use which symbols?a) $\leq, \geq$
b) <, >
39.
a) $x \leq-2$ AND $x>5$
b) $x \leq-2$ OR $x>5$c) $x \geq-2$ OR $x<5$
d) $-2 \leq x<5$
40. The radius of the gears produced at a factory must be 6 inches in length with a tolerance of 0.1 inches. The gears with radius beyond the tolerated lengths will be thrown away. Which of the following inequalities can be used to assess which gears are eligible? ( $x$ is the length of the radius)
a) $|x-6| \leq 0.1$
b) $|x-6| \geq 0.1$c) $|x-0.1| \leq 6$
$\square$ d) $|x-0.1| \geq 6$
41. A type of mobile phone produced by NOKIA must be less than 8 ounces in weight with a tolerance of 0.3 ounces. The mobiles that are not within the tolerated weight must be recycled. Which of the following inequalities can be used to assess which mobiles are tolerable? (W is the weight of the mobiles).a) $|w-.3|<=8$
b) $|w-.3|>=8$c) $|w-8|<=.3$
d) $|w-8|>=.3$
42. John is looking for a job after graduation. The salary which he is satisfied with must be $\$ 3000$ with a tolerance of $\$ 500$. Choose the salary John would accept.
a) $\$ 3,478$
b) $\$ 3,792$c) $\$ 2,489$
d) $\$ 2,256$

## Answer Key

| 1. a | 12. C | 23. a | 34. a |
| :---: | :---: | :---: | :---: |
| 2. b | 13. a | 24. a | 35. c |
| 3. a | 14. d | 25. c | 36. c |
| 4. C | 15. b | 26. c | 37. c |
| 5. a | 16. a | 27. a | 38. a |
| 6. c | 17. b | 28. a | 39. |
| 7. b | 18. d | 29. c | 40. a |
| 8. b | 19. c | 30. a | 41. c |
| 9. c | 20. a | 31. a | 42. a |
| 10. a | 21. c | 32. a |  |
| 11. a | 22. a | 33. a |  |

