Name: $\qquad$ .

Date:

1. Solve for $x: 1.5 x=30$
2. Solve for $x: 0.6 x+1.5=3.9$
3. Solve for $x$ : $\frac{2}{3} x=-12$
4. Solve for $x$ : $\frac{2}{3} x-1=5$
5. Solve for $x: 4(x-2)-3=9$
6. Solve for $x$ : $21=3(x+2)$
7. Solve for $x: \frac{3}{2} x+2=14$
8. Solve for $x: 0.02 x+4.1=6.3$
9. Solve for $x: \frac{x}{5}-3=7$
10. Solve for $x: \frac{2}{5} x-7=3$
11. Solve for $x: 2(3 x-3)+2=26$
12. What is the value of $n$ in the equation $0.6(n+10)=3.6$ ?
A. -0.4
B. 5
C. -4
D. 4
13. What is the value of $p$ in the equation $2(3 p-4)=10$ ?
A. 1
B. $2 \frac{1}{3}$
C. 3
D. $\frac{1}{3}$
14. What is the value of $w$ in the equation $0.04 w+0.6=2.4$ ?
A. 0.045
B. 0.45
C. 4.5
D. 45
15. Solve for $x: 5 x-2(x+1)=10$.
16. Solve for $x: \quad 15 x-3(3 x+4)=6$
A. 1
B. $-\frac{1}{2}$
C. 3
D. $\frac{1}{3}$
17. The statement "The sum of twice a number and 18 is greater than 25 " can be expressed as
A. $2 n+18=25$
B. $2(n+18)>25$
C. $2(n+18)>50$
D. $2 n+18>25$
18. Mrs. Smith wrote "Eight less than three times a number is greater than fifteen" on the board. If $x$ represents the number, which inequality is a correct translation of this statement?
A. $3 x-8>15$
B. $3 x-8<15$
C. $8-3 x>15$
D. $8-3 x<15$
19. The sign shown below is posted in front of a roller coaster ride at the Wadsworth County Fairgrounds.


If $h$ represents the height of a rider in inches, what is a correct translation of the statement on this sign?
A. $h<48$
B. $h>48$
C. $h \leq 48$
D. $h \geq 48$
20. The length of a rectangle is 15 and its width is $w$. The perimeter of the rectangle is, at most, 50 . Which inequality can be used to find the longest possible width?
A. $30+2 w<50$
B. $30+2 w \leq 50$
C. $30+2 w>50$
D. $30+2 w \geq 50$
21. On February 18, from 9 a.m. until 2 p.m., the temperature rose from $-14^{\circ} \mathrm{F}$ to $36^{\circ} \mathrm{F}$. What was the total increase in temperature during this time period?
A. $50^{\circ}$
B. $36^{\circ}$
C. $32^{\circ}$
D. $22^{\circ}$
22. On June 17, the temperature in New York City ranged from $90^{\circ}$ to $99^{\circ}$, while the temperature in Niagara Falls ranged from $60^{\circ}$ to $69^{\circ}$. The difference in the temperatures in these two cities must be between
A. $20^{\circ}$ and $30^{\circ}$
B. $20^{\circ}$ and $40^{\circ}$
C. $25^{\circ}$ and $35^{\circ}$
D. $30^{\circ}$ and $40^{\circ}$
23. The total score in a football game was 72 points. The winning team scored 12 points more than the losing team. How many points did the winning team score?
A. 30
B. 42
C. 54
D. 60
24. Lois is four times as old as her son Dan. The sum of their ages is 40 . How old is Dan?
25. If the sum of a number and four is multiplied by two, the result is 28 . What is the number?
26. If 3 times a number is decreased by 5 , the result is 7 . Find the number.
27. Every month, Omar buys pizzas to serve at a party for his friends. In May, he bought three more than twice the number of pizzas he bought in April. If Omar bought 15 pizzas in May, how many pizzas did he buy in April?
28. What is the circumference of a circle whose radius is 6 ?
A. $6 \pi$
B. $12 \pi$
C. $36 \pi$
D. $3 \pi$
29. The area of a circle is $36 \pi$. What is the radius of the circle?
30. If the circumference of a circle is $28 \pi$, what is the radius of that circle?
31. What is the area of a circle whose diameter is 10 ?
A. $10 \pi$
B. $20 \pi$
C. $25 \pi$
D. $100 \pi$
32. The area of a circle is $16 \pi$. What is the circumference of the circle?
A. $4 \pi$
B. $8 \pi$
C. $64 \pi$
D. $256 \pi$
33. The area of a circle is represented by $16 \pi$. What is the length of a diameter of the circle?
A. 16
B. 8
C. $4 \sqrt{2}$
D. 4
1.

Answer: 20
Points: 1
2.

Answer: 4
Points: 1
3.

Answer: $\quad-18$
Points: 1
4.

Answer: $\quad 9$
Points: 1
5.

Answer: 5
Points: 1
6.

Answer: 5
Points: $\quad 1$
7.

Answer: 8
Points: 1
8.

Answer: $\quad 110$
Points: 1
9.

Answer: 50
Points: 1
10.

Answer: 25
Points: 1
11.

Answer: 5
Points: 1
12.

Answer: C
Points: 1
13.

Answer: C
Points: 1
14.

Answer: D
Points: 1
15.

Answer: 4
Points: 1
16.

Answer: $\quad$ C
Points: 1
17.

Answer: D
Points: 1
18.

Answer: A
Points: 1
19.

Answer: D
Points: 1
20.

Answer: B
Points: 1
21.

Answer: A
Points: 1
22.

Answer: B
Points: $\quad 1$
23.

Answer: B
Points: 1
24.

Answer: 8
Points: 1
25.

Answer: 10
Points: 1
26.

Answer: 4
Points: 1
27.

Answer: 6
Points: 1
28.

Answer: B
Points: 1
29.

Answer: 6
Points:
1
30.

Answer: 14
Points: 1
31.

Answer: C
Points: 1
32.

Answer: B
Points: $\quad 1$
33.

Answer: B
Points: $\quad 1$

