$\qquad$

## Algebra Concepts: Summer Post-Assessment

Questions 1-3: Add and subtract the integers.


Please stop, put your pencil down and wait for the next directions.
$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 4-6: Multiply and divide the integers.

| 4. |  |
| :--- | :--- | :--- |



Please stop, put your pencil down and wait for the next directions.
$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 7-9: Write the ordered pair for the point.

$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 10-12: Find the equivalent expression.
10.

The product of $x$ and 3, increased by 4
○ $4 x+3$
○ $3(x+4)$
○ $3 x+4$
○ $\quad x+3+4$
11.

5 less than 8 times $x$
○ $8 x-5$

- $5 x-8$
○ $8-5 x$
- $8(x-5)$

12. 

7 times the difference of $x$ and 3

○ $3 x-7$
○ $3(x-7)$
○ $7 x-3$
○ $7(x-3)$
$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 13-15: Evaluate the expression for the given value of $x$.
13. Evaluate $3 x+6$ for $x=4$.
$\qquad$
14. Evaluate $x^{2}+4$ for $x=5$.
$\qquad$
15. Evaluate $15-4 x$ for $x=2$.
$\qquad$
$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 16-18: Find the equivalent expression.
16.

$$
x+x
$$

○ $2 x$

- $2 x^{2}$

O $x+2$
O $x^{2}$
17.

$$
2 x+8+4 x
$$

○ $14 x$
○ $2 x+12$

- $6 x+8$

○ $14 x^{2}$
18.

$$
4(x+6)
$$

O $x^{4}+10$
○ $4 x+24$
$4 x+6$
O $x+24$

Please stop, put your pencil down and wait for the next directions.
$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 19-21: Solve the equation.
19.

$$
x+3=12
$$

$x=$ $\qquad$
20.

$$
35=5 x
$$

$$
x=.
$$

$\qquad$
21.

$$
\frac{1}{2} x=6
$$

$$
x=
$$

$\qquad$

STOP
Please stop, put your pencil down and wait for the next directions.
$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 22-24: Find the equivalent expression.
22.

$$
(x+4)+(2 x+3)
$$

○ $3 x+7$
○ $3 x+12$

- $2 x+12$
- $\quad 2 x+7$

23. 

$$
(9 x+6)-(2 x+1)
$$

- $11 x+5$
- $7 x+7$
- $11 x+7$
- $7 x+5$

24. 

$$
(5 x+4)-(2 x-3)
$$

○ $7 x-7$

- $10 x-12$
- $3 x+1$
○ $3 x+7$


Please stop, put your pencil down and wait for the next directions.
$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 25-27: Find the equivalent expression.
25.

$$
7(x+3)
$$

○ $7 x+3$
○ $7 x+21$

- $21 x$
○ $x+21$

26. 

$$
4(6 x+2)
$$

- $6 x+8$
○ $24 x+2$
- $32 x$
○ $24 x+8$

27. 

$$
5(2 x+4)+x
$$

- $10 x+20$
- $11 x+20$
○ $31 x$
○ $11 x+4$

Please stop, put your pencil down and wait for the next directions.
$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 28-30: Find the equivalent expression.
28.

$$
\begin{gathered}
4 x+20 \\
04(x+20) \quad \circ 4(x+5) \quad \circ 24 x
\end{gathered}
$$

29. 

$$
24 x-3
$$

$$
\circ-3(8 x+1) \quad \circ 3(8 x-1)
$$

- $21 x$
- $3(21 x-1)$

30. 

$$
\begin{gathered}
15 x+35 \\
\circ 15(x+20) \circ 5(3 x+7) \quad \circ 50 x
\end{gathered}
$$

Please stop, put your pencil down and wait for the next directions.
$\qquad$

## Algebra Concepts: Summer Post

(continued)

Questions 31-33: Solve the equation.
31.

$$
12=3 x-6
$$

$x=$ $\qquad$
32.

$$
4(x+3)=20
$$

$$
x=
$$

33. 

$$
\frac{1}{2} x+3=9
$$

$$
x=
$$

$\qquad$

Please stop, put your pencil down and wait for the next directions.
$\qquad$

