

Math 6 - Unit 3: Expressions

Unit 3 Interim Assessment

Name: _____

Class Period: 1 2 3 4 Date: _____

1) Jennifer is 14 years younger than Chris. This can be represented by the equation $J = C - 14$. If Chris is 54 years old, how old is Jennifer?

Answer: _____

2) Sarah printed a 250 page report at a copy store that charged 12¢ per page to copy. She calculated the cost (c) to print by using the equation $c = \$0.12p$, where p represents the number of pages printed. What was Sarah's printing cost?

Answer: _____

3) If $m = 4$, what is the value of $4(2m + 1)^2$?

Answer: _____

4) The equation $A = 6s^2$ can be used to calculate , the surface area of a cube with edge length . Using this equation, what is the surface area of a cube with an edge length of 15 inches?

Answer: _____

5) What is the value of $2a+3b-4c$ when $a=9$, $b=3$, and $c=2$?

Answer: _____

6) Which expression represents 2 times the difference of d and 16?

- A) $2d - 16$
- B) $16 - 2d$
- C) $2(d - 16)$
- D) $2(16 - d)$

Answer: _____

7) Mr. Goletz started the school year with 24 students in his class. If x students moved out of his class, which expression represents the number of students left in the class?

- A) $x + 24$
- B) $x - 24$
- C) $24 - x$
- D) $24 \div x$

Answer: _____

8) Which expression represents the sum of 3 times x and 7?

- A) $3 + 7x$
- B) $3(x + 7)$
- C) $3x + 7$
- D) $3x + 7x$

Answer: _____

9) Translate this phrase to an algebraic expression: 9 less than the product of 15 and a number (n).

Answer: _____

10) Which expression represents the quotient of the sum of a number (n) and 8, divided by 3?

- A) $\frac{n}{3} + 8$
- B) $\frac{n}{8} + 3$
- C) $\frac{n+8}{3}$
- D) $\frac{n-8}{3}$

Answer: _____

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ANSWER KEY

Name: _____

Class Period: 1 2 3 4 Date: _____

- 1) Jennifer is 14 years younger than Chris. This can be represented by the equation $J = C - 14$. If Chris is 54 years old, how old is Jennifer?

Answer: **Jennifer is 40 years old.**

- 2) Sarah printed a 250 page report at a copy store that charged 12¢ per page to copy. She calculated the cost (c) to print by using the equation $c = \$0.12p$, where p represents the number of pages printed. What was Sarah's printing cost?

Answer: **It will cost \$30.**

- 3) If $m = 4$, what is the value of $4(2m + 1)^2$?

Answer: **324**

- 4) The equation $A = 6s^2$ can be used to calculate , the surface area of a cube with edge length . Using this equation, what is the surface area of a cube with an edge length of 15 inches?

Answer: **1,350 in²**

5) What is the value of $2a+3b-4c$ when $a=9$, $b=3$, and $c=2$?

Answer: **19**

6) Which expression represents 2 times the difference of d and 16?

- A) $2d - 16$
- B) $16 - 2d$
- C) $2(d - 16)$
- D) $2(16 - d)$

Answer: **C**

7) Mr. Goletz started the school year with 24 students in his class. If x students moved out of his class, which expression represents the number of students left in the class?

- A) $x + 24$
- B) $x - 24$
- C) $24 - x$
- D) $24 \div x$

Answer: **C**

8) Which expression represents the sum of 3 times x and 7?

- A) $3 + 7x$
- B) $3(x + 7)$
- C) $3x + 7$
- D) $3x + 7x$

Answer: **C**

9) Translate this phrase to an algebraic expression: 9 less than the product of 15 and a number (n).

Answer: **$15n - 9$**

10) Which expression represents the quotient of the sum of a number (n) and 8, divided by 3?

- A) $\frac{n}{3} + 8$
- B) $\frac{n}{8} + 3$
- C) $\frac{n+8}{3}$
- D) $\frac{n-8}{3}$

Answer: **C**