

Factoring - GCF Lesson Check-In ANSWER KEY

MONDAY MAY 18, 2020

Complete all questions by 5:00 pm today.

* Required

(1) Choose the correct answer to the question. *

What does it mean to **factor** an expression?

- A. Create an equivalent expression that is a sum
- B. Create an equivalent expression that is a product
- C. Determine the GCF of the terms of the expression
- D. Divide the expression by the GCF of the terms

Factor → multiplication NOT addition.

Choices C. and D. describe the process of factoring not its meaning.

Mark only one oval.

- A.
- B.
- C.
- D.

(2) Choose the correct answer to the question. *

Write $9x^2 - 33x + 3$ in factored form.

- A. $3x^2 - 11x + 1$
- B. $3(3x^2 - 11x + 1)$
- C. $3(3x^2 - 11x)$
- D. 3

$9x^2 - 33x + 3$	GCF = 3
$\frac{9x^2 - 33x + 3}{3 \quad 3 \quad 3}$	Divide by GCF
$3x^2 - 11x + 1$	Quotient
$3(3x^2 - 11x + 1)$	Write as a product

Mark only one oval.

- A.
- B.
- C.
- D.

(3) Choose the correct answer to the question. *

Factor $12x^2 + 36x - 24$ by factoring out the GCF.

- A. $4(3x^2 + 9x - 6)$ C. $6(2x^2 + 6x - 4)$
 B. $2(6x^2 + 18x - 12)$ **D. $12(x^2 + 3x - 2)$**

$12x^2 + 36x - 24$	GCF = 12
$\frac{12x^2 + 36x - 24}{12 \quad 12 \quad 12}$	Divide by GCF
$x^2 + 3x - 2$	Quotient
$12(x^2 + 3x - 2)$	Write as a product

Mark only one oval.

- A.
 B.
 C.
 D.

(4) Choose the correct answer to the question. *

Which expression is the complete factored form of $30x - 45$?

- A. $5(6x - 9)$ C. $3(10x - 15)$
B. $15(2x - 3)$ D. All of the above

$30x - 45$	GCF = 15
$\frac{30x - 45}{15 \quad 15}$	Divide by GCF
$2x - 3$	Quotient
$15(2x - 3)$	Write as a product

Mark only one oval.

- A.
 B.
 C.
 D.

(5) Choose the correct answer to the question.

Factor the following four expressions. Which two expressions share a common factor?

- I. $11x + 44$ II. $14x + 21$ III. $9x + 21$ IV. $5x + 20$

- A. I and II C. II and III
B. I and IV D. III and IV

Mark only one oval.

- A.
 B.
 C.
 D.

	I.	II.	III.	IV.
Find GCF	$11x + 44$	$14x + 21$	$9x + 21$	$5x + 20$
Divide by GCF	$\frac{11x + 44}{11 \quad 11}$	$\frac{14x + 21}{7 \quad 7}$	$\frac{9x + 21}{3 \quad 3}$	$\frac{5x + 20}{5 \quad 5}$
Quotient	$x + 4$	$2x + 3$	$3x + 7$	$x + 4$
Write as a product	$11(x + 4)$	$7(2x + 3)$	$3(3x + 7)$	$5(x + 4)$