Factoring - AM Lesson Check-In ANSWER KEY

WEDNESDAY MAY 20, 2020

Complete all questions by 5:00 pm today.

* Required

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

The factored form of $x^2 + 15x + 36$ is

A. $(x + 3)(x + 12)$

C. $(x + 6)(x + 6)$

B. $(x + 2)(x + 18)$

D. $(x + 4)(x + 9)$

$x^2 + 15x + 36$

$(x + 3)(x + 12)$

Multiply to 36 / Add to 15

1, 36	-1, -36
2, 18	-2, -18
3, 12	-3, -12
4, 9	-4, -9
6, 6	-6, -6

Mark only one oval.

- [x] A.
- [ ] B.
- [ ] C.
- [ ] D.

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

The factored form of $x^2 - x - 6$ is

A. $(x - 3)(x + 2)$

C. $(x + 3)(x - 2)$

B. $(x - 1)(x + 6)$

D. $(x + 1)(x - 6)$

$x^2 - 1x - 6$

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

Multiply to -6 / Add to -1

1, -6	-1, 6
2, -3	-2, 3

Mark only one oval.

- [x] A.
- [ ] B.
- [ ] C.
- [ ] D.

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

If one factor of $x^2 - 18x + 32$ is $x - 2$ then the other factor is

A. $x + 16$

C. $x + 34$

B. $x + 9$

D. $x - 16$

$x^2 - 18x + 32$

$(x - 2)(x - 16)$

Multiply to 32: 1, 32 | -1, -32 | 2, 16 | -2, -16 | 4, 8 | -4, -8

Add to -18: -2, -16

Mark only one oval.

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

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

If $x^2 + 3x + c = (x - 4)(x + p)$, then:

A. $p = -7$ and $c = 4$

C. $p = 7$ and $c = -4$

B. $p = 7$ and $c = -28$

D. $p = -7$ and $c = 28$

A. $(x - 4)(x - 7)$ $x^2 - 11x + 28$ ✗	C. $(x - 4)(x + 7)$ $x^2 + 3x - 28$ ✗
B. $(x - 4)(x + 7)$ $x^2 + 3x - 28$ √	D. $(x - 4)(x - 7)$ $x^2 - 11x + 28$ ✗

Mark only one oval.

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

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

Factor the following three expressions. Which expression(s) have a factor of $x - 3$?

I. $x^2 + 3x - 18$ II. $x^2 - 9x + 18$ III. $x^2 - 3x - 18$

A. III, only

C. I and II

B. II, only

D. I, II and III

Mark only one oval.

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

I.	II.	III.
$x^2 + 3x - 18$ $(x + 6)(x - 3)$	$x^2 - 9x + 18$ $(x - 6)(x - 3)$	$x^2 - 3x - 18$ $(x + 3)(x - 6)$