#1

ID: f5c3e3b8

Which expression is equivalent to $(m^4 q^4 z^{-1})(mq^5 z^3)$, where m, q, and z are positive?

- A) $m^4 q^{20} z^{-3}$
- B) $m^5 q^9 z^2$
- C) $m^6 q^8 z^{-1}$
- D) $m^{20} q^{12} z^{-2}$

#3

ID: e312081b

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

Which of the following is equivalent to the given expression?

- A) 3x 2
- B) 3x + 2
- C) 3x 8
- D) 3x + 8

#2

ID: 72ebc024

Which expression is equivalent to $16x^3y^2 + 14xy$?

- A) 2xy(8xy + 7)
- B) $2xy(8x^2y+7)$
- C) $14xy(2x^2y+1)$
- D) $14xy(8x^2y+1)$

#4

ID: 4ac59df6

Which expression is equivalent to (8yz)(y)(7z)?

- A) $56y^2z^2$
- B) $56y^2z$
- C) 56*yz*
- D) 16*yz*

#5

ID: 70482e20

Which expression is equivalent to $11x^3 - 5x^3$?

- A) $16x^3$
- B) $6x^{3}$
- C) $6x^6$
- D) $16x^{6}$

#6

ID: 8452c42b

Which expression is equivalent to $50x^2 + 5x^2$?

- A) $250x^2$
- B) $10x^2$
- C) $45x^2$
- D) $55x^2$

#9

ID: 02489d55

Which expression is equivalent to $19(x^2 - 7)$?

- A) $19x^2 133$
- B) $19x^2 26$
- C) $19x^2 7$
- D) $19x^2 + 12$

#10

#7

ID: 0536ad4f

ID: 60fdb4d4

Which expression is equivalent to

20w - (4w + 3w)?

- A) 10w
- B) 13w
- C) 19w
- D) 21w

Which expression is equivalent to

$$(2x^2 - 4) - (-3x^2 + 2x - 7)$$
?

- A) $5x^2 2x + 3$
- B) $5x^2 + 2x 3$
- C) $-x^2 2x 11$
- D) $-x^2 + 2x 11$

#8

ID: 1d3fee25

#11 ID: 4a5af623

Which of the following is equivalent to

$$3(x+5)-6$$
 ?

- A) 3x 3
- B) 3x 1
- C) 3x + 9
- D) 15x 6

Which expression is a factor of $2x^2 + 38x + 10$?

- A) 2
- B) 5*x*
- C) 38x
- D) $2x^{2}$

Math I Advanced Math I Equivalent expressions I Easy

#12 ID: 49efde89

The expression $2x^2 + ax$ is equivalent to x(2x+7) for some constant a. What is the value of a ?

- A) 2
- B) 3
- C) 4
- D) 7

#13

ID: 9ed9f54d

Which of the following is equivalent to $2(x^2 - x) + 3(x^2 - x)$?

- A) $5x^2 5x$
- B) $5x^2 + 5x$
- C) 5x
- D) $5x^{2}$

#14

ID: 294db8ec

Which of the following is equivalent to $2x^3 + 4$?

- A) $4(x^3 + 4)$
- B) $4(x^3 + 2)$
- C) $2(x^3 + 4)$
- D) $2(x^3 + 2)$

#15

ID: bdb0aa23

Which expression is equivalent to

$$5x^5 - 6x^4 + 8x^3$$
?

- A) $x^4 (5x 6)$
- B) $x^3 (5x^2 6x + 8)$
- C) $8x^3(5x^2 6x + 1)$
- D) $6x^5(-6x^4 + 8x^3 + 1)$

#16

ID: beb86a0c

Which expression is equivalent to $9x^2 + 5x$?

- A) x(9x + 5)
- B) 5x(9x + 1)
- C) 9x(x+5)
- D) $x^2(9x+5)$

#17

ID: 6e06a0a7

Which of the following expressions is equivalent to $2a^2(a+3)$?

- A) $5a^{3}$
- B) 8*a*⁵
- C) $2a^3 + 3$
- D) $2a^3 + 6a^2$

#18

ID: 499cb491

Which expression is equivalent to $5x^2 - 50xy^2$?

- A) $5x(x 10y^2)$
- B) $5x(x 50y^2)$
- C) $5x^2(10xy^2)$
- D) $5x^2(50xy^2)$

#19

ID: 67e866b5

Which expression is equivalent to $9x^2 + 7x^2 + 9x$?

- A) $63x^4 + 9x$
- B) $9x^2 + 16x$
- C) $25x^5$
- D) $16x^2 + 9x$

#20

ID: fd65f47f

Which expression is equivalent to

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

- A) $2x^2 + 7x + 10$
- B) $2x^2 + 6x 8$
- C) $3x^2 + 7x 10$
- D) $3x^2 + 7x 8$

#21

ID: df0ef054

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

Which of the following is equivalent to the expression above?

- A) $x^3 + 5x$
- B) $3x^3 + x$
- C) $2x^6 x^4 6x^2$
- D) $3x^6 x^4 6x^2$

#22

ID: 127b2759

Which expression is equivalent to $8 + d^2 + 3$?

- A) $d^2 + 24$
- B) $d^2 + 11$
- C) $d^2 + 5$
- D) $d^2 11$

#23

ID: fb96a5b3

Which of the following expressions is equivalent to 2(ab - 3) + 2?

- A) 2ab 1
- B) 2ab 4
- C) 2ab 5
- D) 2ab 8

#24 ID: df747160

Which expression is equivalent to $17(x^2 - 100y^2)$?

A)
$$17(x - 2y)(x - 50y)$$

B)
$$17(x - 2y)(x + 50y)$$

C)
$$17(x - 10y)(x - 10y)$$

D)
$$17(x - 10y)(x + 10y)$$

#27

Which expression is equivalent to $256w^2$ - 676?

B)
$$(8w - 13)(8w + 13)$$

C)
$$(8w - 13)(8w - 13)$$

D)
$$(16w - 26)(16w + 26)$$

#25 ID: e597050f

Which expression is equivalent to 9x + 6x + 2y + 3y?

A)
$$3x + 5y$$

B)
$$6x + 8y$$

C)
$$12x + 8y$$

D)
$$15x + 5y$$

ID: 0354c7de

ID: 1e8d7183

$$5x + 15$$

Which of the following is equivalent to the given expression?

A)
$$5(x+3)$$

B)
$$5(x+10)$$

C)
$$5(x+15)$$

D)
$$5(x + 20)$$

Which expression is equivalent to 34x + 34y?

B)
$$34(x + y)$$

#**29** ID: fd4b2aa0

Which expression is equivalent to $12x^3 - 5x^3$?

A)
$$7x^6$$

B)
$$17x^3$$

C)
$$7x^{3}$$

D)
$$17x^6$$

ID: d4d513ff

Which expression is equivalent to $x^2 + 3x - 40$?

A)
$$(x-4)(x+10)$$

B)
$$(x-5)(x+8)$$

C)
$$(x-8)(x+5)$$

D)
$$(x - 10)(x + 4)$$

Which expression is equivalent to 12x + 27?

A)
$$12(9x + 1)$$

#32

B)
$$27(12x + 1)$$

C)
$$3(4x + 9)$$

D)
$$3(9x + 24)$$

#31

ID: 974d33dc

Which of the following expressions is equivalent to the sum of $(r^3 + 5r^2 + 7)$ and $(r^2 + 8r + 12)$?

A)
$$r^5 + 13r^3 + 19$$

B)
$$2r^3 + 13r^2 + 19$$

C)
$$r^3 + 5r^2 + 7r + 12$$

D)
$$r^3 + 6r^2 + 8r + 19$$