

Mathematics: Lesson-1.4

Assessment



Question 1

Factor completely: $5m^2 + 20m + 20$

A. $5(m + 2)^2$

B. $5(m + 2)(m - 2)$

C. $5(m - 2)^2$

D. $5(m^2 + 4m + 2)$

Question 2

The greatest common factor of $28r^4s^2 + 7r^3s - 35r^4s^3$ is

A. $7r^3s$

B. r^3

C. rs

D. r^3s

Question 3

$$(x + 6)^2 =$$

A. $x^2 + 36$

B. $x^2 + 12x + 36$

C. $x^2 - 36$

D. $x^2 - 12x + 36$

Question 4

If $3x$ is a factor of $3x^2 - 27x$, what is the other factor?

A. $x - 3$

B. $x^2 - 9$

C. $x - 9$

D. $x + 3$

Question 5

Which expression is equivalent to $5x(x + 1) - 3(x + 1)$?

A. $(x + 1)(5x - 3)$

B. $5x - 3(x + 1)$

C. $5x^2 - 2x - 3$

D. $(x + 1)(5x + 3)$

Question 6

When $x^3 - 16x$ is factored completely, the answer is

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

B. $x(x - 4)(x + 4)$

C. $x^2(x - 16)$

D. $x(x - 4)^2$

Question 7

Factor completely $8x^2 - 72$

A. $8(x - 3)(x - 3)$

B. $8(x - 3)(x + 3)$

C. $8(x^2 - 9)$

D. $8(x^2 + 9)$

Question 8

Factor $14xy^2 - 2xy$

A. $2xy(7y - 1)$

B. $-2xy^2(-7y)$

C. $2x(7y^2 - y)$

D. $2y^2(7x - 1)$

Question 9

Which of the following is not a perfect square?

A. $4m^2 - 12m + 9$

B. $x^2 + 8x + 16$

C. $4x^2 - 20x + 25$

D. $9x^2 + 12x - 4$

E. All are perfect squares

Question 10

Factor $L^2 - 8L + 12$

A. $(L - 6)(L + 2)$

B. $(L + 6)(L + 2)$

C. $(L - 6)(L - 2)$

D. $(L + 6)(L - 2)$