

Factoring GCF 3

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Factor out the GCF from the polynomial.

1)  $6m^6 + 8m^4 - 10m^2$  1) \_\_\_\_\_

2)  $21x^3 - 9x^2 + 15x$  2) \_\_\_\_\_

3)  $30x + 10$  3) \_\_\_\_\_

4)  $32x - 8$  4) \_\_\_\_\_

5)  $28x^4y + 36xy^6$  5) \_\_\_\_\_

6)  $40x^9y^8 - 32x^7y^5 + 48x^5y^3$  6) \_\_\_\_\_

7)  $24p + 12q - 12$  7) \_\_\_\_\_

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Find the GCF for the list.

8) 2x, x  
A) x B) 1 C) 2 D) 2x 8) \_\_\_\_\_

9)  $14m^5, 56m^8$   
A)  $56m^5$  B)  $14m^5$  C)  $784m^3$  D)  $14m^3$  9) \_\_\_\_\_

10) 36, 15  
A) 1 B) 6 C) 3 D) 15 10) \_\_\_\_\_

11) 300, 800  
A) 1 B) 2 C) 100 D) 25 11) \_\_\_\_\_

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Factor a negative number or a GCF with a negative coefficient from the polynomial.

12)  $-5x - 35$  12) \_\_\_\_\_

13)  $-5x^6 + 15x^5 - 5x^3$  13) \_\_\_\_\_

14)  $-27y^3 + 15y$  14) \_\_\_\_\_

15)  $-6x^4 + 9x^3 - 3x^2$  15) \_\_\_\_\_

## Answer Key

Testname: FACTORGCF

- 1)  $2m^2(3m^4 + 4m^2 - 5)$
- 2)  $3x(7x^2 - 3x + 5)$
- 3)  $10(3x + 1)$
- 4)  $8(4x - 1)$
- 5)  $4xy(7x^3 + 9y^5)$
- 6)  $8x^5y^3(5x^4y^5 - 4x^2y^2 + 6)$
- 7)  $12(2p + q - 1)$
- 8) A
- 9) B
- 10) C
- 11) C
- 12)  $-5(x + 7)$
- 13)  $-5x^3(x^3 - 3x^2 + 1)$
- 14)  $-3y(9y^2 - 5)$
- 15)  $-3x^2(2x^2 - 3x + 1)$