

1. Evaluate the following expressions given the functions below:

$g(x) = 3x + 1$	$f(x) = x^2 + 7$		$j(x) = 2x + 9$
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a. $g(10) =$

b. $f(3) =$

c. $h(-2) =$

d. $j(7) =$

e. $h(36)$

f. $f(-4)$

Factor by removing the GCF.

2. $66v + 30$

3. $20x^2 - 4x$

4. $25x^4 + 40x^2$

5. $12y^2 + 21y - 30$

6. $100p^7 - 400p^4$

7. $28p - 42p^2 - 35p^3$

Factor by grouping.

8. $3x^3 - 4x^2 + 9x - 12$

9. $5n^3 + 10n^2 + 3n + 6$

10. $35x^2 - 5x - 56x + 8$

11. $2p^3 - 5p^2 + 6p - 15$

Factor by grouping.

12. $8xy + 6x - 20y - 15$

13. $12xy - 28x - 15y + 35$

14. $m^3 - m^2 + 2m - 2$

15. $6aw - 36ak + 6b^2w - 36b^2k$