

SM2 HW #2-8 (Common Factors, Mult. Binomials)**Factor the common factor out of each expression.**

1) $40n + 48$

2) $8p^3 - 8p^2$

3) $2 + 10n^2 + 20n^3$

4) $7m^2 - 35m + 49$

5) $-16k^3 + 8k^2 + 18k - 8$

6) $25x^5 + 40x^2 + 30x - 30$

Find each product.

7) $(m + 5)(m - 3)$

8) $(n + 4)(n + 1)$

9) $(v + 5)(v + 5)$

10) $(n + 2)(n + 2)$

11) $(8a - 6)(8a - 7)$

12) $(5n + 5)(8n + 2)$

13) $(n + 8)(6n + 6)$

14) $(2x + 1)(7x - 5)$

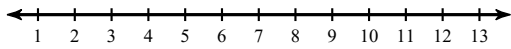
Solve each equation.

15) $|n - 10| = 12$

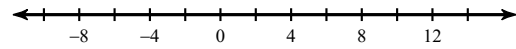
16) $|2 + k| = 2$

Write the solution to the inequality in: (a) Simplified inequality notation, (b) Interval notation then (c) graph the solution.

17) $|b - 8| < 2$



18) $|x - 2| > 8$



Solve each equation. Show your work.

19) $4x - 4(2 - 4x) = -128$

20) $-12 + 6x = 6(3 + 6x)$

21) Solve for 'x'
 $2x - 5y = 9$

22) The area of a trapezoid is given by the following formula:
 $A = \frac{1}{2}h(b_1 + b_2)$ Solve for b_1 (one step rewrite)