

HW 1-3 Factoring Completely

(1-3a) Factor each completely.

1) $m^2 - 4$

2) $n^2 - 9$

3) $25b^2 - 16$

4) $n^2 - 1$

5) $4r^2 - 1$

6) $9n^2 - 4$

(1-3b) Factor each completely.

7) $-21v^2 + 9v + 12$

8) $2b^3 + 19b^2 + 42b$

9) $5n^3 - 6n^2$

10) $-7x^2 + 65x - 72$

11) $2x^2 - 19x + 42$

12) $7a^2 + 48a - 7$

(1-3c) Solve each equation by factoring.

$$13) \ 24b^2 + 52b + 24 = 0$$

$$14) \ 4p^2 + 22p + 10 = 0$$

$$15) \ 9b^2 + 57b + 60 = 0$$

$$16) \ 6a^2 + 26a - 20 = 0$$

$$17) \ 2n^2 + 9n + 12 = 2$$

$$18) \ 3n^2 + 16n + 21 = 5$$

$$19) \ 3x^2 + 17x + 23 = 3$$

$$20) \ 6x^2 - 8x - 6 = 2$$

(1-1c) Solve each equation.

$$21) \ -1 + \frac{1}{3}x = -2x - \frac{5}{3}x$$

$$22) \ -\frac{3}{2}x + 1 = \frac{23}{12} - \frac{10}{3}x$$

$$23) \ -3p + 4 = 2(1 - p)$$

$$24) \ 10 + 2x = -(x + 2)$$

$$25) \ -2(x + 3) = -3 - 3x$$

$$26) \ 3(n + 2) + 2n = n - 10$$