Basic Factorising Practice #1

Factorise

1. $3x - 6$
2. $k^2 - 2k$
3. $6x - 18$
4. $5y + 10$
5. $6y + 18$
6. $2k + 10$
7. $x^2 - 2x$
8. $4x + 16$
9. $3x + 9$
10. $3x - 12$
11. $k^2 + 2k$
12. $y^2 - 4y$
13. $6x + 18$
14. $x^2 + 2x$
15. $6k - 6$
16. $k^2 + 3k$
17. $2k + 10$
18. $16 + 4k$
19. $2k - 10$
20. $6x + 6$

Factorise Fully

21. $6k - 15$
22. $y^3 - 3y^2$
23. $3xy + xy^2$
24. $4k - 16x$
25. $^-6x - 6$
26. $20 - 4x$
27. $4x^2 + 12x$
28. $5kx + 25k$
29. $^-3y - 3$
30. $3x^2 - 15x$

Answers: Basic Factorising Practice #1

Factorise

1. $3x - 6 = 3(x - 2)$
2. $k^2 - 2k = k(k - 2)$
3. $6x - 18 = 6(x - 3)$
4. $5y + 10 = 5(y + 2)$
5. $6y + 18 = 6(y + 3)$
6. $2k + 10 = 2(k + 5)$
7. $x^2 - 2x = x(x - 2)$
8. $4x + 16 = 4(x + 4)$
9. $3x + 9 = 3(x + 3)$
10. $3x - 12 = 3(x - 4)$
11. $k^2 + 2k = k(k + 2)$
12. $y^2 - 4y = y(y - 4)$
13. $6x + 18 = 6(x + 3)$
14. $x^2 + 2x = x(x + 2)$
15. $6k - 6 = 6(k - 1)$
16. $k^2 + 3k = k(k + 3)$
17. $2k + 10 = 2(k + 5)$
18. $16 + 4k = 4(4 + k)$ or $k(k + 4)$
19. $2k - 10 = 2(k - 5)$
20. $6x + 6 = 6(x + 1)$

Factorise Fully ("fully" means **every** factor has to be taken out, as below)

21. $6k - 15 = 3(2k - 5)$
22. $y^3 - 3y^2 = y^2(y - 3)$
23. $3xy + xy^2 = xy(3 + y)$
24. $4k - 16x = 4(k - 4x)$
25. $^-6x - 6 = {}^-6(x + 1)$
26. $20 - 4x = 4(5 - x)$
27. $4x^2 + 12x = 4x(x + 3)$
28. $5kx + 25k = 5k(x + 5)$
29. $^-3y - 3 = {}^-3(y + 1)$
30. $3x^2 - 15x = 3x(x - 5)$