Further Factorising

Factorise and simplify the following:

1. $\dfrac{2x+6}{2x+2}$

2. $\dfrac{3x+15}{x^2+7x+10}$

3. $\dfrac{x^2+10x+24}{x^2+9x+18}$

4. $\dfrac{x^2+10x+25}{x^2+3x-10}$

5. $\dfrac{x^2-2x-63}{x^2-5x-36}$

6. $\dfrac{x^2+x-30}{x^2-2x-15}$

7. $\dfrac{x^2-9x+14}{x^2-11x+28}$

8. $\dfrac{x^2-49}{2x-14}$

9. $\dfrac{x^2+x-6}{2x^2+7x+3}$

10. $\dfrac{x^2+9x+20}{2x^2+11x+12}$

11. $\dfrac{3x+15}{4x+20}$

12. $\dfrac{x^2+4x+3}{x^2+8x+7}$

13. $\dfrac{x^2-x-6}{x^2-5x+6}$

14. $\dfrac{2x^2+x}{3x^2+x}$

15. $\dfrac{x^2-x-12}{2x^2-5x-12}$

16. $\dfrac{2x^2+4x+1}{2x^2+3x+1}$

17. $\dfrac{3x^2+10x-8}{2x^2+5x-12}$

18. $\dfrac{2x^2+7xy+3y^2}{2x^2+3xy+y^2}$

19. $\dfrac{8a^2+16ab+6b^2}{20a^2+22ab+6b^2}$

20. $\dfrac{12a^2-22ab+6b^2}{6a^2-3ab-9b^2}$

Further Factorising - Answers

Factorise and simplify the following:

1. $\frac{x+3}{x+1}$
2. $\frac{3}{x+2}$
3. $\frac{x+4}{x+3}$
4. $\frac{x+5}{x-2}$
5. $\frac{x+7}{x-4}$
6. $\frac{x+6}{x-3}$
7. $\frac{x-2}{x-4}$
8. $\frac{x+7}{2}$
9. $\frac{x-2}{2x+1}$
10. $\frac{x+5}{2x.+2}$
11. $\frac{3}{4}$
12. $\frac{x+3}{x+7}$
13. $\frac{x+2}{x-2}$
14. $\frac{2x+1}{3x+1}$
15. $\frac{x+3}{2x+3}$
16. $\frac{2x+1}{x+1}$
17. $\frac{3x-2}{2x-3}$
18. $\frac{3+3y}{x+y}$
19. $\frac{2a+3b}{5a+3b}$
20. $\frac{6a-2b}{3a+3b}$