

1. 21

2. $\frac{8t^{21}}{s^{21}}$

3. 13

4. $8t + 5u$

5. $\frac{2x\sqrt{3y}}{7}$

6. $9m^2 - 7m + 3 + \frac{2}{m+6}$

7. $\frac{5x}{6x+7}$

8. $\frac{5x-4}{x-1}$

9. $12 - 6\sqrt{3}$

10. $12\sqrt{2}$

11. $\frac{36+4\sqrt{6}}{75}$

12. $(3x-4)(5x-2y)$

13. $(4y-3)(3y-2)$

14. $(3x+2)(5x+2)$

15. $(t+4)(t^2-4t+16)$

16. $x = 30$

17. $x = 77$

18. $x = -6, \frac{2}{3}$

19. $z = -4 \pm \sqrt{21}$

20. $y = 19$

21. $x = 4$

22. $x = \frac{-3 \pm \sqrt{6}}{3}$

23. $x \geq -1$

24. $4x + 5y = -28$

25. $5x - 3y = -27$

26. $(-4, 3)$

27. infinite solution

28. graph

29. graph

30. graph

31. The integers are 83, 84 and 85

32. $2\frac{1}{2}$ hours33. $2\frac{2}{5}$ hours working together

34. 9 km by 12 km

35. boat: 5 mph; current: 3 mph

36. \$20,000 at 4% & \$8,000 at 10%

37. 60 ml of 10% and 50 ml of 32%

38. $50\sqrt{34} \approx 292$ miles