

Year 7 revision answers

Decimal calculations

1. £13.53
2. £3.55
3. £51.24
4. £4.35

Fractions / Decimals / %

5. $\frac{34}{100} = \frac{17}{50}$
6. 0.07
7. 0.105
8. 16%
9. 0.35

BIDMAS

10. 8
11. 19
12. 30

Prime numbers

13. $42 = 2 \times 3 \times 7$, $28 = 2 \times 2 \times 7$
14. HCF = 14
15. LCM = 84
16. 21
17. 7

Reverse calculations and number sentences

18. a. 23.8, b. 0.34, c. 2380, d. 3400
19. a. 25, 36, n^2 , b. 13, 16, $3n-1$, c. 19, 23, $4n-1$, d. -2, -5, $-3n+10$

Fraction questions

20. 4 packets
21. 27 days
22. a. $\frac{24}{35}$ b. $\frac{11}{35}$ c. $\frac{11}{70}$

Ratio

23. a. 12 eggs, 480g flour, 600g butter
b. 10 eggs, 400g flour, 500g butter
24. a. 25 b. 24 c. 24

Speed and distance

25. a. 108 km, b. 2 hours 55 mins, c. 10 m/s

Algebra

Substitution

26. 3, 12, 48, 144, 11, -90

Simplification

27. $2a + 2b$, $6a + 2b$, a^2b , $6a^3$

Solving

28. $x=3$, $x=3$, $x=4$, $x=-2$

Brackets

29. $3x+12$

30. $-7-3x$

31. $5(x + 3)$, $2x(x+2)$

Bearings

32. a. 40km, b. 180, c. on diagram, d. about 75 km

Pie Charts

33. degrees 90, 135, 75, 60

34. Other = 72, value= 30, 6, 6, 6, 12, 1 person = 6 degree

Averages

35. a. Table values = 0, 2, 8, 12, 24 mean = $\frac{46}{20} = 2.3$

b. mode = 4, c. range = 4, d. median = 2

36. mean average = 3

Circle questions

37. area = 28.3 cm^2 , circumference = 18.8 cm

38. area = 12.6 cm^2 , perimeter = 14.2 cm

area = 2.54 m^2 , perimeter = 9.5 m

area = 24.7 cm^2 , perimeter = 25.9 cm

Nets, volumes and surface area

39. a. 480 cm^3 b. 480 ml c. 376 cm^2 d. net drawn e. isometric drawing