1. a) $12 + 13 + 14 - 25 = 25 + 14 - 25 = 14$
   b) $6 - 8 - 10 + 12 = -2 - 10 + 12 = -12 + 12 = 0$
   c) $6 - (8 - 10) - 12 = 6 - (-2) - 12 = 6 + 2 - 12 = 8 - 12 = -4$
   d) $2 \cdot 18 + 30 : 6 - 8 \cdot 5 : 10 = 36 + 5 - 40 : 10 = 41 - 4 = 37$
   e) $(1 - 8) - (1 - 9) - (1 - 10) = -7 - (-8) - (-9) = -7 + 8 + 9 = 1 + 9 = 10$

2. a) $15 - 24 : 3 \cdot 2 = 15 - 8 \cdot 2 = 15 - 16 = -1$
   b) $15 - 24 : (3 \cdot 2) = 15 - 24 : 6 = 15 - 4 = 11$
   c) $(15 - 24) : 3 \cdot 2 = -9 : 3 \cdot 2 = -3 \cdot 2 = -6$

3. a) $50 : (-25) \cdot (-3) = -2 \cdot (-3) = 6$
   b) $-3 \cdot (-4) : (-2) + 1 = 12 : (-2) + 1 = -6 + 1 = -5$
   c) $(2 - 5) \cdot (2 - 3) = -3 \cdot -1 = 3$

4. a) $100 - \{80 - [60 - (40 - 20)]\} = 100 - \{80 - [60 - 20]\} = 100 - \{80 - 40\} = 100 - 40 = 60$
   b) $[7 - (4 - 3) \cdot 2] \cdot (6 - 4 \cdot 2) = [7 - 1 \cdot 2] \cdot (6 - 8) = [7 - 2] \cdot (-2) = 5 \cdot (-2) = -10$

5. $a)$ $27 \cdot 95 + 27 \cdot 5 = 27\,(95 + 5) = 27 \cdot 100 = 2700$
   $b)$ $68 \cdot 13 - 68 \cdot 3 = 68(13 - 3) = 68 \cdot 10 = 680$

6. a) $(-7 + 15) - [(-5) \cdot (-2) \cdot 4] = 8 - [10 \cdot 4] = 8 - 40 = -32$
   b) $-6 : 2 + (-5) \cdot 3 = -3 + (-15) = -3 - 15 = -18$

7. a) $5 + 5 \cdot 2 + (-4 - 26) : 3 + 5 = 5 + 10 + (-30) : 3 + 5 = 15 - 10 + 5 = 10$
   b) $6 \cdot 6 : 3 + 3 = 36 : 3 + 3 = 12 + 3 = 15$
   c) $(12 - 5 - 4 - 3) \cdot 6 - (7 - 8) = 0 \cdot 6 - (-1) = 0 + 1 = 1$

8. a) $(1 - 8) - (1 - 9) + (1 - 10) : 3 = -7 - (-8) + (-9) : 3 = -7 + 8 - 3 = -2$
   b) $2 \cdot (15 - 24) + 3 \cdot 2 = 2 \cdot (-9) + 6 = -18 + 6 = -12$

9. a) $20 : 4 \cdot (-5) = 5 \cdot (-5) = -25$

   b) $(12 + 4) : 8 = 16 : 8 = 2$

10. a) $\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$ b) $\frac{1}{3} - \frac{1}{4} = \frac{4}{12} - \frac{3}{12} = \frac{1}{12}$

    c) $\frac{1}{4} + \frac{4}{5} = \frac{5}{20} + \frac{16}{20} = \frac{21}{20} = 1\frac{1}{20}$ d) $\frac{1}{10} - \frac{1}{5} = \frac{1}{10} - \frac{2}{10} = -\frac{1}{10}$

11. a) $2\frac{1}{4} + 3\frac{3}{4} = \frac{9}{4} + \frac{15}{4} = \frac{24}{4} = 6$ b) $\frac{7}{8} - \frac{3}{4} - \frac{1}{2} = \frac{7}{8} - \frac{6}{8} - \frac{4}{8} = \frac{1}{8} - \frac{4}{8} = -\frac{3}{8}$

  c) $\frac{5}{6} + \frac{2}{3} - \frac{5}{12} = \frac{10}{12} + \frac{8}{12} - \frac{5}{12} = \frac{18}{12} - \frac{5}{12} = \frac{13}{12} = 1\frac{1}{12}$ d) $1\frac{2}{5} - \frac{4}{5} = \frac{7}{5} - \frac{4}{5} = \frac{3}{5}$

12. a) $\frac{2}{3} \cdot \frac{2}{3} = \frac{4}{9}$ b) $\frac{1}{3} \cdot \frac{3}{4} = \frac{3}{12} = \frac{1}{4}$ c) $7 \cdot 2\frac{1}{3} = \frac{7}{1} \cdot \frac{7}{3} = \frac{49}{3} = 16\frac{1}{3}$

  d) $-3 \cdot 3\frac{3}{4} = -\frac{3}{1} \cdot \frac{15}{4} = -\frac{45}{4} = -11\frac{1}{4}$

13. a) $\frac{2}{3} : \frac{2}{3} = \frac{2}{3} \cdot \frac{3}{2} = \frac{6}{6} = 1$ b) $\frac{1}{3} : \frac{3}{4} = \frac{1}{3} \cdot \frac{4}{3} = \frac{4}{9}$

  c) $7 : \frac{4}{7} = \frac{7}{1} \cdot \frac{7}{4} = \frac{49}{4} = 12\frac{1}{4}$ d) $-1\frac{2}{3} : 2\frac{2}{3} = -\frac{5}{3} : \frac{8}{3} = -\frac{5}{3} \cdot \frac{3}{8} = -\frac{15}{24} = -\frac{5}{8}$

14. a) $\left(\frac{1}{9} - \frac{5}{6}\right) : \frac{2}{3} = \left(\frac{2}{18} - \frac{15}{18}\right) \cdot \frac{3}{2} = -\frac{13}{18} \cdot \frac{3}{2} = -\frac{39}{36} = -1\frac{3}{36} = -1\frac{1}{12}$

  b) $\left(1 - \frac{2}{3} \cdot \frac{5}{6}\right) : 1\frac{1}{3} = \left(1 - \frac{10}{18}\right) : \frac{4}{3} = \left(\frac{18}{18} - \frac{10}{18}\right) \cdot \frac{3}{4} = \frac{8}{18} \cdot \frac{3}{4} = \frac{24}{72} = \frac{1}{3}$

  c) $\left(1 - \frac{1}{4}\right) - \frac{1}{2} \cdot \frac{1}{5} = \frac{3}{4} - \frac{1}{10} = \frac{15}{20} - \frac{2}{20} = \frac{13}{20}$

15. a) $\frac{1}{2} + \frac{3}{4} = \frac{2}{4} + \frac{3}{4} = \frac{5}{4} = 1\frac{1}{4}$ b) $\frac{2}{3} - \frac{1}{3} - \frac{1}{2} = \frac{1}{3} - \frac{1}{2} = \frac{2}{6} - \frac{3}{6} = -\frac{1}{6}$

  c) $\frac{2}{3} \cdot 1\frac{1}{5} = \frac{\mathbf{2}}{3} \cdot \frac{6}{5} = \frac{12}{15} = \frac{4}{5}$ d) $2\frac{3}{4} : 3 = \frac{11}{4} \cdot \frac{1}{3} = \frac{11}{12}$

16. a) $\frac{2}{3} \cdot \frac{2}{3} - \frac{2}{3} \cdot \frac{1}{3} = \frac{\mathbf{4}}{\mathbf{9}} - \frac{\mathbf{2}}{\mathbf{9}} = \frac{\mathbf{2}}{\mathbf{9}}$ b) $\frac{1}{2} - \frac{2}{3} : \frac{1}{\mathbf{2}} = \frac{\mathbf{1}}{\mathbf{2}} - \frac{\mathbf{2}}{\mathbf{3}} \cdot \frac{2}{1} = \frac{1}{2} - \frac{4}{3} = \frac{3}{6} - \frac{8}{6} = -\frac{5}{6}$

17. $1 - \left(\frac{1}{4} + \frac{1}{5} + \frac{1}{6}\right) = 1 - \left(\frac{15}{60} + \frac{12}{60} + \frac{10}{60}\right) = \frac{60}{60} - \frac{37}{60} = \frac{23}{60}$ V: $\frac{23}{60}$

18. a) $(-5)^2 = -5 \cdot (-5) = 25$ b) $-5^2 = -(5 \cdot 5) = -25$

  c) $\left(\frac{2}{3}\right)^2 = \frac{2}{3} \cdot \frac{2}{3} = \frac{4}{9}$ d) $\frac{2^2}{3} = \frac{4}{3} = 1\frac{1}{3}$

19. a) $(3 \cdot x)^3 = 3^3 \cdot x^3 = 27x^3$ b) $3^3 + (-3)^3 = 27 + (-27) = 27 - 27 = 0$

     c) $(-1)^{12} = -1 \cdot (-1) \cdot (-1) \ldots = 1$(parillinen määrä)   d) $(-1)^{99} = -1$ (pariton määrä)

20. a) $(2^3)^2 - (2^2)^3 = 2^{3 \cdot 2} - 2^{2 \cdot 3} = 2^6 - 2^6 = 0$

   b) $(-3)^3 + (-3)^2 + (-3)^1 = -27 + 9 - 3 = -21$

   c) $2^1 + 2^0 + 2^{-1} = 2 + 1 + \frac{1}{2} = 3\frac{1}{2}$

   d) $3^2 \cdot 3^{-3} = 9 \cdot \left(\frac{1}{3}\right)^3 = 9 \cdot \frac{1}{27} = \frac{9}{27} = \frac{1}{3}$

21.   a) $x^7 \cdot x^8 = x^{7+8} = x^{15}$ b) $(x^7)^8 = x^{7 \cdot 8} = x^{56}$

   c) $\left(\frac{x}{3}\right)^3 = \frac{x^3}{3^3} = \frac{x^3}{27}$ d) $\frac{x \cdot x \cdot x^3}{x^4} = \frac{x^{1+1+3}}{x^4} = \frac{x^5}{x^4} = x^{5-4} = x$

22.   a) $\sqrt{3^2 + 4^2} =) \sqrt{9 + 16} =) \sqrt{25} = 5$ b) $\sqrt{10^2 - 6^2} = \sqrt{100 - 36} = \sqrt{64} = 8$

   c) $\sqrt{1^2 + 2^2 + (-2)^2} = \sqrt{1 + 4 + 4} = \sqrt{9} = 3$

23.   a) $11^2 = 121$ b) $0^2 = 0$ c) $\sqrt{10}^2 = 10$ d) $x^2 = -4, ei\ mahdollista$

24.   a) $1^3 + 2^2 \cdot 5^2 = 1 + 4 \cdot 25 = 1 + 100 = 101$

     b) $(-2)^3 - (-3)^2 = -8 - 9 = -17$

     c) $3^2 + \sqrt{9} \cdot \sqrt{16} = 9 + 3 \cdot 4 = 9 + 12 = 21$

     d) $-2^2 \cdot 2^{-2} + 2^0 = -4 \cdot \left(\frac{1}{2}\right)^2 + 1 = -4 \cdot \frac{1}{4} + 1 = -\frac{4}{4} + 1 = -1 + 1 = 0$

25.   a) $\frac{1^2}{2} + \left(\frac{1}{2}\right)^2 = \frac{1}{2} + \frac{1}{4} = \frac{2}{4} + \frac{1}{4} = \frac{3}{4}$

     b) $\sqrt{16} + \sqrt{9} + \sqrt{16 + 9} = 4 + 3 + \sqrt{25} = 7 + 5 = 12$

     c) $2^3 - 2^3 \cdot \sqrt{13^0} = 8 - 8 \cdot \sqrt{1} = 8 - 8 \cdot 1 = 8 - 8 = 0$

d) $(-1)^5 - \sqrt{4^2 + 3^2} = -1 - \sqrt{16 + 9} = -1 - \sqrt{25} = -1 - 5 = -6$

26. a) $x + 4 + (2x - 5) = x + 4 + 2x - 5 = 3x - 1$
    b) $x - (2x - 4) = x - 2x + 4 = -x + 4$
    c) $4x \cdot 2x^2 = 4 \cdot 2 \cdot x \cdot x^2 = 8x^3$
    d) $-3x^2 \cdot (-2x^2) = 6\text{x}^4$

27. a) $3(x + 2) = 3x + 6$
    b) $-2x(3x - 2) = -6x^2 + 4x$
    c) $3x^2(-2x^2 + 3x - 5) = -6x^4 + 9x^3 - 15x^2$

28. Sievennä
    a) $(7x + 3) \cdot 4x - 3x = 28x^2 + 12x - 3x = 28x^2 + 9x$
    b) $5a - 3(2a + 6) = 5a - 6a - 18 = -a - 18$
    c) $5x \cdot (-4x) - 3(x^2 + 2x) = -20x^2 - 3\text{x}^2 - 6\text{x} = -23\text{x}^2 - 6\text{x}$

29. Sievennä
    a) $-x^2 - (3x + 2) - 4(-x - 5) + x(x - 2) =$
    $-x^2 - 3x - 2 + 4x + 20 + x^2 - 2x = -x + 18$

    b) $-x^2 - [(x - 2x^2) + (-x - x^2)] = -x^2 - [x + 2x^2 - x - x^2] = -x^2 - [x^2 - 2x]$
    $= -x^2 - x^2 + 2x = -2x^2 + 2x$

30. a) $2x - (x + 3) + (2 - 2x) = 2x - x - 2 + 3 - 2x = -x - 1$
    b) $5x - 2(x + 3) = 5x - 2x - 6 = 3x - 6$
    c) $x(x - 3) - x + 3 = x^2 - 3x - x + 3 = x^2 - 4x + 3$

31. Sievennä
    a) $(3x - 2) - (x + 3) + (-2 + 2x) = 3x - 2 - x - 3 - 2 + 2x = 4x - 7$
    b) $2(x - 3) - 3(x + 3) = 2x - 6 - 3x - 9 = -x - 15$
    c) $a(a + 1) - a(a - 1) = a^2 + a - a^2 + a = 2a$

32. a) $2x + 4 = 8 \iff 2x = 8 - 4 \iff 2x = 4 \iff x = 2$
    b) $5x - 2 = 8 \iff 5x = 8 + 2 \iff 5x = 10 \iff x = 2$
    c) $9 = 3 \iff 3x = 9 \iff x = 3$

33. a) $4x - 3 = 3x - 10 \iff 4x - 3x = -10 + 3 \iff x = -7$
    b) $x + 9 = 5 - x \iff x + x = 5 - 9 \iff 2x = -4 \iff x = -2$

c) $-2x + 5 = -3x + 9 \leftrightarrow -2x + 3x = 9 - 5 \leftrightarrow = 4$

34. a) $-2x + 2 = -x - 10 \leftrightarrow -2x + x = -10 - 2 \leftrightarrow -x = -12 \leftrightarrow = 12$
b) $2(x - 2) = 3(x - 2) \leftrightarrow 2x - 4 = 3x - 6 \leftrightarrow 2x - 3x = -6 + 4 \leftrightarrow$
$-x = -2 \leftrightarrow x = 2$
c) $-4x = -6x \leftrightarrow -4x + 6x = 0 \leftrightarrow 2x = 0 \leftrightarrow x = 0$

35. a) $4(x + 2) = 2(x - 3) \leftrightarrow 4x + 8 = 2x - 6 \leftrightarrow 4x - 2x = -6 - 8 \leftrightarrow$
$$2x = -14 \leftrightarrow x = -7$$
b) $2x = 5x - 9 \leftrightarrow 2x - 5x = -9 \leftrightarrow -3x = -9 \leftrightarrow x = 3$
c) $7x + 4 = 4x + 7 \leftrightarrow 7x - 4x = 7 - 4 \leftrightarrow 3x = 3 \leftrightarrow x = 1$

36. a) $(3 + x) - (2x - 3) = 0 \leftrightarrow 3 + x - 2x + 3 = 0 \leftrightarrow -x + 6 = 0 \leftrightarrow$
$-x = -6 \leftrightarrow x = 6$
b) $5(x - 1) + 1 = x - 3(1 - x) \leftrightarrow 5x - 5 + 1 = x - 3 + 3 \leftrightarrow$
$5x - 4 = 4x - 3 \leftrightarrow 5x - 4x = -3 + 4 \leftrightarrow x = 1$

37. a) $4x + (5x - 6) = 12 + 3x \leftrightarrow 4x + 5x - 6 = 12 + 3x \leftrightarrow$
$$4x + 5x - 3x = 12 + 6 \leftrightarrow 6x = 18 \leftrightarrow x = 3$$
b) $5(2x - 1) + x = 6x - (3 - 4x) \leftrightarrow 10x - 5 + x = 6x - 3 + 4x \leftrightarrow$
$$11x - 5 = 10x - 3 \leftrightarrow 11x - 10x = -3 + 5 \leftrightarrow x = 2$$

38. a) $3x + 5 = 20 - 2x \leftrightarrow 3x + 2x = 20 - 5 \leftrightarrow 5x = 15 \leftrightarrow x = 3$

b) $2(4x - 5) + 10 = 16 \leftrightarrow 8x - 10 + 10 = 16 \leftrightarrow 8x = 16 \leftrightarrow x = 2$

c) $4x - 2(2x + 6) = 12 \leftrightarrow 4x - 4x - 12 = 12 \leftrightarrow -12 = 12$ epätosi, ei ratkaisua

39. a) $2x - 6 = 10 - 2x \leftrightarrow 2x + 2x = 10 + 6 \leftrightarrow 4x = 16 \leftrightarrow x = 4$

b) $2(3x + 5) - (10 + x) = 0 \leftrightarrow 6x + 10 - 10 - x = 0 \leftrightarrow 5x = 0 \leftrightarrow x = 0$

c) $3x - 4 = 4x - (4 + x) \leftrightarrow 3x - 4 = 4x - 4 - x \leftrightarrow 3x - 4 = 3x - 4$
$\leftrightarrow 0 = 0$ tosi, ratkaisuna kaikki luvut.

40. a) $f(5) = 3 \cdot 5 - 5 = 15 - 5 = 10$
b) $f(0) = 3 \cdot 0 - 5 = 0 - 5 = -5$

c) $f(-3) = 3 \cdot (-3) - 5 = -9 - 5 = -14$

d) $f\left(\frac{5}{3}\right) = 3 \cdot \frac{5}{3} - 5 = 5 - 5 = 0$

41. a) $g(9) = -2 \cdot 9 + 3 = -18 + 3 = -15$

b) $g(0) = -2 \cdot 0 + 3 = 0 + 3 = 3$

c) $g(-1{,}5) = -2 \cdot (-1{,}5) + 3 = 3 + 3 = 6$

d) $g\left(\frac{3}{4}\right) = -2 \cdot \frac{3}{4} + 3 = -\frac{6}{4} + 3 = -1\frac{1}{2} + 3 = 1\frac{1}{2}$

42. a) $f(3) = 3^2 - 3 \cdot 3 + 4 = 9 - 9 + 4 = 4$

b) $f(-1) = (-1)^2 - 3 \cdot (-1) + 4 = 1 + 3 + 4 = 8$

c) $f\left(\frac{1}{2}\right) = (\frac{1}{2})^2 - 3 \cdot \frac{1}{2} + 4 = \frac{1}{4} - \frac{3}{2} + 4 = \frac{1}{4} - \frac{6}{4} + \frac{16}{4} = \frac{11}{4}$

a) $f(0) = 0^2 - 3 \cdot 0 + 4 = 4$

43. a) $-2x - 4 = 3x + 11 \leftrightarrow -2x - 3x = 11 + 4 \leftrightarrow -5x = 15 \leftrightarrow x = -3$

b) $-2x - 4 = 20 \leftrightarrow -2x = 20 + 4 \leftrightarrow -2x = 24 \leftrightarrow x = -12$

c) $3x + 11 = -22 \leftrightarrow 3x = -22 - 11 \leftrightarrow 3x - 33 \leftrightarrow x = -11$

44. a) $f(3) = 2 \cdot 3 - 1 = 6 - 1 = 5$ b) $(-3) = 2 \cdot (-3) - 1 = -6 - 1 = -7$

c) $g(3) = -3 + 2 = -1$ d) $g(-3) = -(-3) + 2 = 3 + 2 = 5$

e) $f\left(\frac{1}{2}\right) = 2 \cdot \frac{1}{2} - 1 = 1 - 1 = 0$ f) $\left(-\frac{1}{3}\right) = -\left(-\frac{1}{3}\right) + 2 = \frac{1}{3} + \frac{6}{3} = \frac{7}{3} = 2\frac{1}{3}$

g) $2x - 1 = -x + 2 \leftrightarrow 2x + x = 2 + 1 \leftrightarrow 3x = 3 \leftrightarrow x = 1$

45. a) 0,567 m = 56,7 cm   b) 1 m = 0,001 km   c) 1,07 dm = 0,107 m

46. a) 1,5 m^2 = 0,015 a   b) 1100 m^2 = 0,11 ha   c) 1,73265 km^2 = 17326,5 a

47. a) 1,7 m^3 = 1700 dm^3 b) 1,73 m^3 = 1730000 cm^3

    c) 15630000 = 0,01563 km^3

48. a) 6 dl = 0,6 l   b) 7,96 l = 7960 ml   c) 17 ml = 0,17 dl

49. a) 27 m^3 = 27000 dm^3 = 27000 l   b) 0,54 dm^3 = 0,54 l = 5,4 dl

         c) 17 ml = 0,017 l = 0,017 dm^3 = 17 cm^3

50. a) $5 \; km \cdot 5 \; km = 25 \; km^2 = 2500 \; ha$

   b) $25 \; cm \cdot 20 \; cm \cdot 40 \; cm = 20\,000 \; cm^3 = 20 \; dm^3 = 20 \; l$

c) $50 \; l = 50 \; dm^3 = 0,05 \; m^3. \;\; 1300kg \cdot 0,05 = 65 \; kg$

51. a) 14500 m = 14,5 km   b) 47 a = 4700 m²   c) 42,5 m³ = 42500 dm³

d) 50 cm³ = 0,05 dm³ = 0,05 l   e) 1 m³ = 1000 dm³ = 1000 l = 10000 dl

52. a) Astiaan jää tilaa 4 l – 3 l = 1 l = 1 dm³ = 1000 cm³.
Jääkuution tilavuus on $2cm \cdot 2cm \cdot 2cm = 8 \; cm^3$.
Tilaan mahtuu siis $1000 : 8 = 125$ jääkuutiota.

b) $10m \cdot \; 4m \; \cdot 1,5 \; m = 60 \; m^3 = 60000 \; dm^3 = 60000 \; l$.
Vesi maksaa $0,008 \; € \cdot 60000 = 480 \; €$.

53. a) $0,07 \cdot 100\% = 7\%$ b) $0,70 \cdot 100\% = 70\%$ c) $1,45 \cdot 100\% = 145\%$

d) $\frac{1}{4} = 0,25 = 25\%$ e) $2 = 200\%$ f) $\frac{4}{125} = 0,032 = 3,2\%$

54. a) $8\% : 100\% = 0,08$ b) $2,4\% : 100\% = 0,024$ c) $57,32\% : 100\% = 0,5732$

d) $0,3\% = 0,003$ e) $100\% = 1$ f) $453\% = 4,53$

55. a) $200 \cdot 0,12 = 24$ b) $200 \cdot 0,224 = 44,8$ c) $200 \cdot 0,5 = 100$

d) $200 \cdot 0,854 = 170,8$ e) $200 \cdot 1 = 200$ f) $200 \cdot 2 = 400$

56. $15600 \; kg \; \cdot 0,537 = 8377,2 \; kg \; \approx \; 8380 \; kg$

57. $100\% + 8\% = 108\% = 1,08.$ a) $250€ \cdot 1,08 = 270€$

b) $1095€ \cdot 1,08 = 1182,60€$ c) $85 \; snt \cdot 1,08 = 91,8 \; snt \approx 92 \; snt$

58. $100\% - 15\% = 85\% = 0,85.$ a) $800€ \; \cdot 0,85 = 680 \; €$

b) $320€ \cdot 0,85 = 272€$ c) $750€ \cdot 0,85 = 637,50€$ d) $250 \cdot 0,85 = 212,50€$

59. $1350€ \cdot 1,25 = 1687,50 \; €$ $1687,50 \; € \cdot 0,75 = 1265,625€ \; \approx 1266 \; €$

60. Epäpuhtauksien määrä , 55% suodetetaan, joten jäljelle jää $100\% - 55\% = 45\%$.

$0,45 \cdot 0,45 \cdot x = 0,2025x$. Jäljelle jää 20,25% epäpuhtauksia, eli suodatettiin 79,75%.

61. a) $0,2 \cdot 100\% = 20\%$ b) $0,004 \cdot 100\% = 0,4\%$ c) $1,5 \cdot 100\% = 150\%$

62. a) $0,15 \cdot 450 = 67,5$ b) $0,75 \cdot 500 = 375$ c) $1,4 \cdot 25 = 35$

63. a) $1,08 \cdot 2400\ € = 2592\ €$ b) $0,92 \cdot 45,50€ = 41,86€$

64. $0,8 \cdot x = 370\ € \quad \leftrightarrow \quad x = 370€ : 0,8 = 462,50\ €$

65. a) $\frac{45}{360} = 0,125 = 12,5\%$ b) $\frac{30}{50} = 0,6 = 60\%$

   c) $\frac{500\ g}{4\ 000\ g} = 0,125 = 12,5\%$ d) $\frac{24\ m\verb|^|2}{1200\ m\verb|^|2} = 0,02 = 2\%$

66. Muutos 50 €, alkuperäinen hinta 550 €. Muutos $\frac{50}{550} = 0,00909.. \approx 9,1\%$

67. Molemmissa lukujen erotus on 20.   a) $\frac{20}{40} = 0,5 = 50\%$ b) $\frac{20}{60} = 0,333.. \approx 33\%$

68. Muutos 0,4 prosenttiyksikköä. Alkuperäinen 6,25 prosenttia. $\frac{0,4}{6,25} = 0,064 = 6,4\%$.

69. $\frac{1,30\ €}{3,20\ €} = 0,40625 \approx 41\%$. Silakan hinta on 41% lohen hinnasta, eli 59% halvempi.

70. Muutos 3 kg, alkuperäinen 44 kg. $\frac{3\ kg}{44\ kg} = 0,068181.. \approx 6,8\%$

71. Ero 1000 €. Verrataan heinäkuun myyntiin 14000€. $\frac{1000€}{14000€} = 0,0714.. \approx 7,1\%$

72. Uusi hinta on 100% - 18% = 82% alkuperäisestä hinnasta x.

   a) $\frac{0,82\ x}{x} = 0,82 = 82\%$ b) $\frac{x}{0,82\ x} = \frac{1}{0,82} = 1,2195 \ldots \approx 122\%$