

## Oplossingen

### Opgave 5 (week 4)

1.  $l = \sqrt{\frac{8M}{g}}$

2.  $t_1 = t_2 - \frac{Q}{mc}$

3.  $r = \sqrt[3]{\frac{3V}{4\pi}}$

4. straal 2x groter

5.  $a = \frac{2(s_t - v_0 t)}{t^2}$

6.  $r = \sqrt{\frac{Gm_1 m_2}{F}}$

7.  $v = \frac{C}{p}$

8.  $R = \sqrt{\frac{3V}{\pi H}}$

9.  $b = \frac{fv}{v - f}$

10.  $p = \frac{v^2 s c_v}{c_p}$

11.  $g = \frac{4\pi^2 L}{T^2}$

12.  $r = \sqrt{\frac{O}{\pi}}$

13.  $R = \frac{a^2 - f^2}{2f}$

14.  $t = \sqrt{\frac{2h}{g}}$

15.  $S = \frac{PR}{Q} + 1$

### Opgave 6 (week 5)

1.  $x = -14$

2. geen oplossing

3.  $x = -20$

4. geen oplossing

5.  $x = 1$

6.  $x = -5$

7.  $x = 3$

8.  $x = \frac{5}{2}$

### Opgave 7

1.  $x = 3$  of  $x = 5$

2.  $x = 2$

3.  $x = -1$  of  $x = 9$

4.  $x = -1$  of  $x = 2$

5.  $x = \frac{9 \pm 3\sqrt{11}}{2}$

6.  $x = 2$

7.  $x = 1$  of  $x = -\frac{10}{3}$

### Opgave 8 (week 6)

1.  $V=30m, H=63m$

2. Hoogte = 3,8m, dakligger = 5,9m

3. 133m

4. hoeken zijn 53°, 60° en 67°, oppervlakte = 83cm<sup>2</sup>

5. 42 meter