

**Svar till diagnostiskt självtest.
Matematisk analys D.**

1. Exercises P6/P7, sid 55: 14 , 26 , 28
26: $\sin(\theta) = \frac{2}{\sqrt{5}}$, $\cos(\theta) = \frac{1}{\sqrt{5}}$ 28: $\sin(\theta) = \frac{12}{13}$, $\tan(\theta) = -\frac{12}{5}$
2. Exercises Chapter 2 Review, sid 171/158: 10 , 22
10: $-\frac{\sin x \cos x}{\sqrt{2+\cos^2 x}}$, 22: $f'(g(x^2)) \frac{2x^2 g'(x^2) - g(x^2)}{x^2}$
3. Exercises 3.5, sid 212/195: 6 , 22
6: $\sqrt{0.51}$, 22: $\sin^{-1}(x) + \frac{x}{\sqrt{1-x^2}}$
4. Exercises 4.9, sid 298/269: 4 , 16 , 18
4: $\frac{a^2}{b^2}$, 16: $-\frac{1}{12}$, 18 : 0
5. Exercises 5.5, sid 333/301: 12 , 40
12: 2π , 40: $-\frac{\sin t}{t}$
6. Exercises Chapter 6 Review, sid 404/365: 10 , 12 , 26
10: $\frac{1}{8} \ln \left| \frac{x-3}{x+5} \right| + C$, 12: $x - \frac{1}{2} \cos(2x) + C$, 26: $\frac{\pi}{2}$