

## 2 Math101 facit til 2. gang

2.1 Svarene er:

$$x = 6, \quad x = -\frac{5}{3}, \quad x = 7, \quad x = -1.$$

2.2 Svarene er:

$$x = \pm 3, \quad x = 3, x = -7, \quad x = 1, x = 2, \quad x = 1, x = -5.$$

2.3 Svarene er:

$$x = -2, \quad x = 14, \quad x = -\frac{5}{2}.$$

2.4 Svarene er:

$$x = 0, x = 3, \quad x = 0, x = \frac{2}{3}, \quad x = 0, x = \frac{1}{2}, \quad x = \pm \frac{2}{5}.$$

2.5 Svaret er  $a = 7$ .

2.6 Svarene er:

$$\frac{x-5}{x-1}, \quad \frac{x-1}{x-3}, \quad x-5.$$

2.7 Svaret er  $a = \frac{4}{9}$ .

2.8 Løsningsmængderne er

$$\mathbb{R}, \quad \emptyset.$$

2.9 Svarene er:

$$x = \frac{9}{5}, \quad x = \frac{29}{22}.$$

2.10 Svarene er:

$$x = 2, x = -10, \quad x = -5, x = -1, \quad x = \frac{1}{2}, x = \frac{1}{3}, \quad x = \pm 10\sqrt{5}.$$

2.11 Svarene er:

$$x = 1 + 2\sqrt{2}, \quad x = \frac{3(2+\pi)}{\pi-\sqrt{2}}, \quad x = -\frac{5}{3}.$$

2.12 Svarene er:

$$x^2 + 1 - 2x = 0, \quad x^2 + \frac{2}{3}x - \frac{1}{3} = 0, \quad x^2 - \sqrt{2}x - 4 = 0.$$

2.13 Svaret er:  $b = \pm 7$ .

2.14 Svarene er:

$$x = \pm 1, x = \pm 2, \quad x = \pm 2, x = \pm \frac{1}{2}.$$