Navn:		Skole:	
Klasse: 20		Dato: 7. januar 2022	Fag: Matematik A

Opgave 252

a:
$$-x^2 - 2.8x + 18.29$$

b: $3x^2 - 24x + 45$
c: $-2x^2 + 4x + 10.5$

Funktion A

$$a = -1$$

$$b = -2.8$$

$$c = 18.29$$

$$D = b^{2} - 4ac$$

$$D = (-2.8)^{2} - 4 \cdot -1 \cdot 18.29$$

$$D = 81$$

$$T\left(-\frac{b}{2a}, -\frac{d}{4a}\right)$$

$$T\left(-\frac{-2.8}{2 \cdot (-1)}, -\frac{81}{4 \cdot (-1)}\right)$$

$$T(-1,4; 20,25)$$

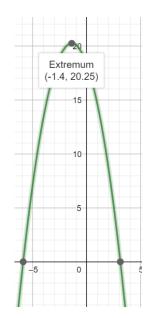
$$x_{1,2} = \frac{-b \pm \sqrt{D}}{2a}$$

$$x_1 = \frac{-(-2.8) + \sqrt{81}}{2 \cdot (-1)}$$

$$x_1 = -5.9$$

$$x_2 = \frac{-(-2.8) - \sqrt{81}}{2 \cdot (-1)}$$

$$x_2 = 3.1$$



Funktion B

$$a = 3$$

$$b = -24$$

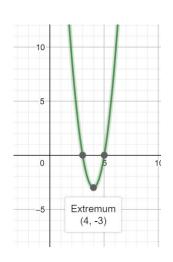
$$c = 45$$

$$D = b^{2} - 4ac$$

$$D = (-24)^{2} - 4 \cdot 3 \cdot 45$$

$$D = 36$$

$$T\left(-\frac{-24}{2\cdot 3}, -\frac{36}{4\cdot 3}\right)$$
$$T(4; -3)$$



Navn:		Skole:	
Klasse: 20		Dato: 7. januar 2022	Fag: Matematik A

$$x_1 = \frac{-(-24) + \sqrt{36}}{2 \cdot 3}$$

$$x_1 = 5$$

$$x_2 = \frac{-(-24) - \sqrt{36}}{2 \cdot 3}$$

$$x_2 = 3$$

Funktion C

$$a = -2$$

$$b = 4$$

$$c = 10.5$$

$$D = b^{2} - 4ac$$

$$D = 4^{2} - 4 \cdot -2 \cdot 10.5$$

$$D = 100$$

$$T\left(-\frac{b}{2a}, -\frac{d}{4a}\right)$$

$$T\left(-\frac{4}{2\cdot(-2)}, -\frac{100}{4\cdot(-2)}\right)$$

$$T(1; 12,5)$$

$$x_1 = \frac{-4 + \sqrt{100}}{2 \cdot (-2)}$$

$$x_1 = -1.5$$

$$x_2 = \frac{-4 - \sqrt{100}}{2 \cdot (-2)}$$

$$x_2 = 3.5$$

