

Keri DAVIES 6/11/20

c) $9x^2 - 4x - 5 = 0$

$$x = \frac{-4 \pm \sqrt{4^2 - 4(9)(-5)}}{2(9)}$$

$$x = \frac{-4 \pm \sqrt{16 + 180}}{18}$$

$$x = \frac{-4 \pm \sqrt{196}}{18}$$

$$x = \frac{-4 \pm 14}{18}$$

$$x = \frac{-4 + 14}{18}$$

$$x = \frac{-4 - 14}{18}$$

$$x = \frac{10}{18}$$

$$x = \frac{-18}{18}$$

$$x = 0.56$$

$$x = -1$$

d)

i) $x^2 + 11x + 30 = 0$

$$(x+5)(x+6) = 0$$

$$x+5=0 \quad x+6=0$$

$$x = -5$$

$$x = -6$$

$$(x+6)(x+5) = 0$$

$$x^2 + 5x + 6x + 30 = 0$$

ii) $x^2 + 13x + 22 = 0$

$$(x+11)(x+2) = 0$$

$$x+11=0 \quad x+2=0$$

$$x = -11 \quad x = -2$$

$$(x+11)(x+2) = 0$$

$$x^2 + 2x + 11x + 22 = 0$$

iii) $x^2 + 100 = 0$

$$(x+10)(x-10) = 0$$

$$x^2 - 10x + 10x - 100$$

$$x+10=0 \quad x-10=0$$

$$x = -10$$

$$x = 10$$