

9-26-17 1<sup>st</sup> Tr. y

From PT2

(25)

$$\begin{array}{r} a^2 + a + 2 \overline{) a^3 + 2a^2 + 3a + 2} \\ \underline{-(a^3 + a^2 + 2a)} \phantom{+ 2} \\ a^2 + a + 2 \\ \underline{-(a^2 + a + 2)} \\ 0 \end{array}$$

(12)  $45n^3y - 18n^4y$

$$9n^3y(5 - 2n)$$

(10)  $125n^3 + 8y^3$

S O F A S  
 $(5n + 2y)(25n^2 - 10ny + 4y^2)$

$$(24) \quad a-5 \sqrt{a^2-25}$$

Rewrite

$$a-5 \sqrt{\begin{array}{r} a+5 \\ a^2+0a-25 \\ -(a^2-5a) \\ \hline 5a-25 \\ 5a-25 \\ \hline 0 \end{array}}$$

$$(19) \quad \frac{n^2-5n-14}{n^2+2n}$$

$$\frac{(n-7)\cancel{(n+2)}}{n\cancel{(n+2)}}$$

$$\frac{n-7}{n} \quad [n \neq -2]$$

$$(33) \quad 20x^2+41x-9=0$$

$$a=20$$

$$b=41$$

$$c=-9$$

$$4ac=-720$$

$$x = \frac{-b \pm \sqrt{b^2-4ac}}{2a}$$

$$x = \frac{-41 \pm \sqrt{1681+720}}{40}$$

$$x = \frac{-41 \pm \sqrt{2401}}{40}$$

$$x = \frac{-41 \pm 49}{40}$$

$$x = \frac{-41+49}{40} \quad \text{OR} \quad x = \frac{-41-49}{40}$$

$$x = \frac{1}{5} \quad \text{OR} \quad x = -2\frac{1}{4}$$

$$\textcircled{13} \quad 8nxy^2 - 8nxy^3$$

$$8nxy^2(1-y)$$

9-26-17 3<sup>rd</sup> Trig

Ch. 2 PT 2 Questions

$$\textcircled{24} \quad a-5 \overline{) \begin{array}{r} a \\ a^2 - 25 \\ \underline{a^2 - 5a} \\ ? \end{array}}$$

Rewrite = ic

$$\begin{array}{r} a+5 \\ a-5 \overline{) a^2 + 0a - 25} \\ \underline{-(a^2 - 5a)} \\ 5a - 25 \\ \underline{-(5a - 25)} \\ 0 \end{array}$$

$$\textcircled{25} \quad a^2+a+2 \overline{) \begin{array}{r} a+1 \\ a^3 + 2a^2 + 3a + 2 \\ \underline{-(a^3 + a^2 + 2a)} \\ a^2 + a + 2 \\ \underline{-(a^2 + a + 2)} \\ 0 \end{array}}$$

$$\textcircled{19} \quad \frac{n^2 - 5n - 14}{n^2 + 2n} \quad 2.7$$

$$\frac{(\cancel{n+2})(n-7)}{n(\cancel{n+2})}$$

$$\frac{n-7}{n} \quad [n \neq -2]$$

$$\textcircled{6} \quad \underline{9}x^2 + 30xy + \underline{25}y^2$$

$$\frac{9}{1,9}$$

$$3,3$$

$$\begin{array}{l} (x \quad 1)(9x \quad 25) \quad \frac{25}{1,25} \\ (x \quad 25)(9x \quad 1) \quad 5,5 \\ (x \quad 5)(9x \quad 5) \\ (3x \quad 1)(3x \quad 25) \\ (3x+5y)(3x+5y) \end{array}$$

$\textcircled{32}$

$$x^2 + 22x + 120 = 0$$

$$a = 1$$

$$b = 22$$

$$c = 120$$

$$4ac = 480$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$x = \frac{-22 \pm \sqrt{484 - 480}}{2}$$

$$x = \frac{-22 \pm 2}{2}$$

$$x = \frac{-22+2}{2}$$

$$\text{OR } x = \frac{-22-2}{2}$$

$$x = -10$$

OR

$$x = -12$$

$$\textcircled{5} \quad 2x^2 + 2x - 24$$

$$2(x^2 + x - 12)$$

$$2(x+4)(x-3)$$

~~$$(2x+8)(x-3)$$~~

New Practice

$$\textcircled{1} \text{ Factor } \underline{3x^2 + 17x + 10}$$

$$\frac{3}{1, 3}$$

$$(x \quad 1)(3x \quad 10)$$

$$(x \quad 10)(3x \quad 1)$$

$$(x \quad 2)(3x \quad 5)$$

$$(x + 5)(3x + 2) \checkmark$$

$$\frac{10}{1, 10}$$

$$\frac{10}{2, 5}$$

$\textcircled{2}$

$$n+3 \sqrt{\begin{array}{r} n^2 + 7n + 2 \\ n^2 + 4n + \frac{-10}{n+3} \\ \hline -(n^2 + 3n) \downarrow \\ \hline 4n + 2 \\ -(4n + 12) \\ \hline -10 \end{array}}$$

9-26-17 4<sup>th</sup> Trig

ch 2 PT 2 questions

$$\begin{array}{r} a+5 \\ a-3 \overline{) a^2+2a-15} \\ \underline{-(a^2-3a)} \phantom{-15} \downarrow \\ 5a-15 \\ \underline{-(5a-15)} \\ 0 \end{array}$$

$$\begin{array}{r} a \\ a-5 \overline{) a^2-25} \\ \underline{-(a^2-5a)} \end{array} \text{ Rewrite}$$

$$\begin{array}{r} a+5 \\ a-5 \overline{) a^2+0a-25} \\ \underline{-(a^2-5a)} \\ 5a-25 \\ \underline{-(5a-25)} \\ 0 \end{array}$$

$$\begin{array}{r} a+1 \\ a^2+a+2 \overline{) a^3+2a^2+3a+2} \\ \underline{-(a^3+a^2+2a)} \\ a^2+a+2 \\ \underline{-(a^2+a+2)} \\ 0 \end{array}$$

$$\textcircled{33} \quad 20x^2 + 41x - 9 = 0$$

$$a = 20 \quad x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$b = 41$$

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$$x = \frac{1}{5}(.2) \quad \text{OR} \quad x = -2\frac{1}{4}(-2.25)$$

New practice

$$\textcircled{1} \quad \text{Factor } 3x^2 - 9x - 12$$

$\frac{3}{1, 3}$	$9x$	$(x + 1)(3x - 12)$	$\frac{12}{1, 12}$
		$(x - 12)(3x + 1)$	$2, 6$
		$(x + 2)(3x + 6)$	$3, 4$
$3(x+1)(x-4)$		$(x + 6)(3x + 2)$	
		$(x + 3)(3x + 4)$	
		$(x - 4)(3x + 3)$	

$$\textcircled{2} \quad x-2 \overline{) x^2 - 5x - 2}$$

$$\begin{array}{r} x - 3 + \frac{-8}{x-2} \\ -(x^2 - 2x) \\ \hline -3x - 2 \\ -(-3x + 6) \\ \hline -8 \end{array}$$



③ Factor  $x^3 - 8y^3$

$$(x - 2y)(\overset{S}{x^2} + \overset{O}{2xy} + \overset{F}{4y^2})$$