Review from text:

Pg. 153

5, 6, 8, 10, , 15

Pg. 155

6, 7

Pg. 547

16, 17

Pg. 548

12, 15

4/

$$x^2-2x+1 \overline{)\,4x^4-2x^2+x-3}$$

$$4x^2+8x+10 \qquad \div (x \pm a)$$

$$4x^4-8x^3+4x^2$$

$$8x^3-6x^2+x$$

$$8x^3-16x^2+8x$$

$$10x^2-7x-3$$

$$10x^2-20x+10$$

$$=13x-13$$

$$\begin{array}{r|ccccc} -1 & 4 & 0 & -2 & 1 & -3 \\ & & -4 & -4 & -2 & -3 \\ \hline & 4 & 4 & 2 & 3 & 0 \end{array}$$

$$\begin{array}{r|cccc} -1 & 4 & 4 & 2 & 3 \\ & & -4 & -8 & -10 \\ \hline & 4 & 8 & 10 & 13 \end{array}$$

2 c) $4k^2 - 9a^2 + 24ab - 16b^2$

$4k^2 - 1(9a^2 - 24ab + 16b^2)$ (3a, 4b)

$4k^2 - (3a - 4b)^2$

$[2k - (3a - 4b)][2k + (3a - 4b)]$

$(2k - 3a + 4b)(2k + 3a - 4b)$

#5) $(2r^2+5r+3)$ div. by $(r+2x)$ Rem $=0$

$(r+7)$

$r=-7$

Rem... Sub. $r=-2x$

$2(-2x)^2+5(-2x)+3=0$

$8x^2-10x+3=0$

$\frac{(8x-6)}{2}\frac{(8x-4)}{4}=0$

$(4x-3)(2x-1)=0$

$x=\frac{3}{4}$ OR $x=\frac{1}{2}$

$(2x+3)(x+1)$

$\left(x+\frac{3}{2}\right)$

$-\frac{3}{2}=2x$

$x=-\frac{3}{4}$

$2x=1$

$x=\frac{1}{2}$

divisible by $(x+2x)$

$(7x+13)$ Equivalent $\left(x+\frac{13}{7}\right)$

7. $\div (x+1)$ Rem $= -17$

sub. $x=-1$ ... should $= -17$

$(-1)^3 + 2k(-1)^2 - p(-1) - 3 = -17$

$-1 + 2k + p - 3 = -17$

$\boxed{2k+p=-13}$

$\div (x-5)$ ---Rem $= 7$

$(x=5) \dashrightarrow = 7$

$(5)^3 + 2k(5)^2 - p(5) - 3 = 7$

$125 + 50k - 5p - 3 = 7$

$\frac{50k}{5} - \frac{5p}{5} = \frac{-115}{5}$

$\boxed{10k-p=-23}$

add $\begin{array}{l} 10k-p=-23 \\ 2k+p=-13 \end{array}$

$\frac{12k}{12} = \frac{-36}{12}$

$k=-3$

$2(-3)+p=-13$

$\boxed{p=-7}$

1. b) $(-5a^4+2b^3)^6 \Rightarrow a^8b^{12}$

$15 \times 25 \times 16$

$15\,(-5a^4)^2(2b^3)^4$

${}_6C_4$

1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
1 5 10 10 5 1
1 6 15 20 15 6 1

$6,0 \quad 5,1 \quad 4,2 \quad 3,3 \quad 2,4$