

Work sheet #12 cont.

$$12. \quad \frac{12}{2a^2 + 4ab + 2b^2} - \frac{8a}{a^3 - ab^2}$$

$$\boxed{AB} \quad \frac{\cancel{12}6}{\cancel{2}(a+b)(a+b)} - \frac{\cancel{8}a}{\cancel{a}(a-b)(a+b)}$$

$$\frac{6}{(a+b)^2} - \frac{8}{(a-b)(a+b)}$$

$$\boxed{CD} \quad (a+b)^2(a-b)$$

$$\boxed{EF} \quad \frac{6(a-b)}{(a+b)^2(a-b)} - \frac{8(a+b)}{(a-b)(a+b)(a+b)}$$

$$\boxed{M} \quad \frac{6a - 6b}{C.D.} - \frac{(8a + 8b)}{C.D.}$$

$$\boxed{A/S} \quad \frac{6a - 6b - 8a - 8b}{C.D.}$$

$$\boxed{S} \quad \frac{-2a - 14b}{C.D.} \quad \boxed{AB} \quad \frac{2(-a - 7b)}{(a+b)^2(a-b)}$$

OR

$$\frac{-2(a + 7b)}{(a+b)^2(a-b)}$$

$$\boxed{13} \quad \frac{st}{25s^2 - t^2} + \frac{2s^2t}{10s^2t + 2st^2}$$

$$\boxed{AB} \quad \frac{st}{(5s-t)(5s+t)} + \frac{\cancel{2s^2t}}{\cancel{2st}(5s+t)}$$

$$\frac{st}{(5s-t)(5s+t)} + \frac{s}{(5s+t)}$$

$$\boxed{CD} \quad (5s-t)(5s+t)$$

$$\boxed{EF} \quad \frac{st}{(5s-t)(5s+t)} + \frac{s(5s-t)}{(5s+t)(5s-t)}$$

$$\boxed{M} \quad \frac{st}{\text{C.D.}} + \frac{5s^2 - st}{\text{C.D.}}$$

$$\boxed{AS} \quad \frac{st + 5s^2 - st}{\text{C.D.}}$$

$$\boxed{S} \quad \frac{5s^2}{(5s+t)(5s-t)}$$

14. $\frac{x^2 + 5xy - 4y^2}{x^2 - 16y^2} - \frac{2xy}{2x^2 + 8xy}$
doesn't factor

AB $\frac{x^2 + 5xy - 4y^2}{(x-4y)(x+4y)} - \frac{2xy}{2x(x+4y)}$

CD $(x-4y)(x+4y)$

EF $\frac{x^2 + 5xy - 4y^2}{\text{C.D.}} - \frac{y(x-4y)}{(x+4y)(x-4y)}$

M $\frac{x^2 + 5xy - 4y^2}{\text{C.D.}} - \frac{(xy - 4y^2)}{\text{C.D.}}$

A/S $\frac{x^2 + 5xy - \cancel{4y^2} - xy + \cancel{4y^2}}{\text{C.D.}}$ **S** $\frac{x^2 + 4xy}{\text{C.D.}}$

AB $\frac{x(x+4y)}{(x+4y)(x-4y)}$

$\frac{x}{x-4y}$

15

$$\frac{2}{(2p-5q)} - \frac{p}{p^2-pq-2q^2} + \frac{4q}{2p^2-9pq+10q^2}$$

AB

$$\frac{2}{(2p-5q)} - \frac{p}{(p-2q)(p+q)} + \frac{4q}{(2p-5q)(p-2q)}$$

$$\text{CD} \quad (2p-5q)(p-2q)(p+q)$$

$$\text{EF} \quad \frac{2(p-2q)(p+q)}{(2p-5q)(p-2q)(p+q)} - \frac{p(2p-5q)}{(p-2q)(p+q)(2p-5q)} + \frac{4q(p+q)}{(2p-5q)(p+q)(p-2q)}$$

$$\text{M} \quad \frac{2p^2-2pq-4q^2}{\text{C.D.}} - \frac{(2p^2-5pq)}{\text{C.D.}} + \frac{4pq+4q^2}{\text{C.D.}}$$

$$\text{AIs} \quad \frac{\cancel{2p^2}-2pq-\cancel{4q^2}-\cancel{2p^2}+5pq+4pq+\cancel{4q^2}}{\text{C.D.}}$$

S

$$\frac{7pq}{(2p-5q)(p-2q)(p+q)}$$

(16)

$$\frac{5}{3v-3} + \frac{3v-1}{1-v^2} + \frac{1}{2v+2}$$

(AB)

$$\frac{5}{3(v-1)} + \frac{3v-1}{(1-v)(1+v)} + \frac{1}{2(v+1)}$$

(-1)(1-v)

$$\frac{-5}{3(1-v)} + \frac{3v-1}{(1-v)(1+v)} + \frac{1}{2(v+1)}$$

(CD)

$$6(1-v)(1+v)$$

$$\begin{aligned} & 3-3v \\ & \overbrace{3(1-v)} \end{aligned}$$

(EF)

$$\frac{(2)(-5)(1+v)}{(2)3(1-v)(1+v)} + \frac{6(3v-1)}{6(1-v)(1+v)} + \frac{\overbrace{1(3)(1-v)}}{2(v+1)(3)(1-v)}$$

(M)

$$\frac{-10-10v}{C.D.} + \frac{18v-6}{C.D.} + \frac{3-3v}{C.D.}$$

(AIS)

$$\frac{-10-10v+18v-6+3-3v}{C.D.}$$

(S)

$$\frac{5v-13}{6(1-v)(1+v)}$$

$$\frac{-5v+13}{6(1-v)(1+v)}$$

$\boxed{17}$

$$\frac{2}{2-3c+c^2} + \frac{2}{2+c-c^2} - \frac{4}{4-4c^2}$$

$$= \frac{2}{c^2-3c+2} + \frac{2}{-c+c+2} - \frac{4}{4-4c^2}$$

 \boxed{AB}

$$\frac{-2}{(c-2)(\cancel{c-1})} + \frac{-2}{(c+1)(\cancel{-c+2})} - \frac{14}{4(1-c)(1+c)}$$

$(1-c)$ $(c-2)$

$$\frac{-2}{(c-2)(1-c)} + \frac{-2}{(c+1)(c-2)} - \frac{1}{(1-c)(1+c)}$$

 $\boxed{CD} (c-2)(1-c)(c+1)$

$$\boxed{EF} \frac{-2(c+1)}{(c-2)(1-c)(c+1)} + \frac{-2(1-c)}{(c+1)(c-2)(1-c)} - \frac{1(c-2)}{(1-c)(1+c)(c-2)}$$

$$\boxed{M} \frac{-2c-2}{c \cdot D} + \frac{-2+2c}{c \cdot D} - \frac{(c-2)}{c \cdot D}$$

$$\boxed{As} \frac{-\cancel{2}c-2-\cancel{2}+\cancel{2}c-c+\cancel{2}}{c \cdot D} = \frac{-c-2}{(c-2)(1-c)(c+1)}$$

FOR EXAM

- ① Finish Worksheet # 12
- ② Quiz # 9 + Quiz # 10
- ③ Review Booklet
(in yellow book pp. 111 - 134)
- ④ Pretest (in yellow book pp 135 -
142)

* Don't go
past p. 142.