5B. $\left(8 y^{5}-2 y^{4}-16 y^{2}+4\right) \div(4 y-1)$

$$
\begin{aligned}
& 4 y - 1 \longdiv { 8 y ^ { 4 } - 2 y ^ { 4 } + 0 y ^ { 3 } - 1 6 y ^ { 2 } + 0 y + 4 } \\
& \begin{array}{r}
\frac{8 / y^{5}-2 y^{4 \prime}}{0 y^{4}+2 y-16 y^{2}+0 y} \\
\frac{\left(-16 y^{2}+4 y\right.}{-4 y+4}
\end{array} \\
& \Leftrightarrow \frac{-4 y+1}{3} \frac{-16 y^{2}}{4 y}=-4 y \\
& -\frac{4 y}{4 y}=-1
\end{aligned}
$$

30. $\frac{x^{3}-3 x^{2}+x-3}{x^{2}+1}$


J anuary 172013 2nd.gwb - 2/4 - Thu J an 172013 09:24:55

$\frac{2 x .4}{5} 5 x^{3}$
$\left(5 x^{3}-13 x^{2}+10 x-8\right) \div(x-2)$.

2 | 5 | -13 | 10 | -8 |
| ---: | ---: | ---: | ---: |
| $\downarrow$ | 10 | -6 | 8 |
| 5 | -3 | 4 | 0 |

$$
5 x^{2}-3 x+4
$$

( $188{ }^{1.308}$

$$
\frac{x^{3}+13 x^{2}-12 x-8}{x+2}
$$

| $\mid$ | 13 | -12 | -8 |
| ---: | ---: | ---: | ---: |
| $\downarrow$ | -2 | -22 | 68 |
| 1 | 11 | -34 | 60 |

$$
x^{2}+11 x-34+\frac{60}{x+2}
$$

5B. $\frac{\left(8 y^{5}-2 y^{4}-16 y^{2}+4\right)}{4} \div \frac{(4 y-1)}{4}$

$$
\begin{gathered}
\left(2 y^{5}-\frac{1}{2} y^{4}\right. \text { oy } \\
\left.4 y^{4}-4 y^{2}+1\right) \\
0 y
\end{gathered} \div\left(y-\frac{1}{4}\right)
$$

$$
\left[\begin{array}{l|rrrrrr}
\frac{1}{4} & 2 & -\frac{1}{2} & 0 & -4 & 0 & 1 \\
& \frac{1}{2} & 0 & 0 & -1 & -\frac{1}{4} \\
\hline 2 & 0 & 0 & -4 & -1 & \frac{3}{4}
\end{array}\right.
$$

$$
2 y^{4}-4 y-1+\frac{\frac{3}{4}}{y-\frac{1}{4}}
$$

$$
2 y^{4}-4 y-1+\frac{3}{4 y-1}
$$

$$
\begin{aligned}
& \frac{\left(8 x^{4}-\stackrel{+(x)}{-} 4 x^{2}+x+4\right)}{2} \div \frac{(2 x+1)}{2} . \\
& \left(4 x^{4}-2 x^{3}-2 x^{2}+\frac{1}{2} x+2\right) \div\left(x+\frac{1}{2}\right) \\
& \begin{array}{ccccc}
-\frac{1}{2} 1 & 4 & 0 & -2 & \frac{1}{2} \\
4 & -2 & 1 & \frac{1}{2} & -\frac{1}{2} \\
\hline 4 & -2 & -1 & 1 & \frac{3}{2}
\end{array} \\
& \frac{4 x^{3}-2 x^{2}-x+1+\frac{\frac{3}{2}}{\left(x+\frac{1}{2}\right)} \times \frac{2}{2}}{3} \\
& 4 x^{3}-2 x^{2}-x+1+\frac{3}{2 x+1}
\end{aligned}
$$

