3-0235 — 50 SHEETS — 5 SQUARES
3-0236 — 100 SHEETS — 5 SQUARES
3-0237 — 200 SHEETS — 5 SQUARES
3-0137 — 200 SHEETS — FILLER
COMET

1) a. indeterminate $\frac{0}{0}$

b. 0 because $\frac{0}{\infty}$

c. 0 because $\frac{1}{\infty}$

d. $\pm\infty$ because $\frac{\infty}{0}$

e. indeterminate $\frac{\infty}{\infty}$

2) a. indeterminate $0\cdot\infty$

b. ∞ because $\infty\cdot 1$

c. ∞ because $\infty\cdot\infty$

5) $\lim\limits_{x\to 1} \frac{x^2-1}{x^2-x}$ has the form $\frac{0}{0}$, but it can be solved by factoring

$$= \lim_{x\to 1} \frac{(x+1)(x-1)}{x(x-1)} = \lim_{x\to 1} \frac{x+1}{x} = \boxed{2}$$

8) $\lim\limits_{x\to 1} \frac{x^a-1}{x^b-1}$ has the form $\frac{0}{0}$. Since we don't know a & b we can't factor and must apply L'Hospital's Rule

$$\overset{H}{=} \lim_{x\to 1} \frac{ax^{a-1}}{bx^{b-1}} = \boxed{\frac{a}{b}}$$

11) $\lim\limits_{t\to 0} \frac{e^t-1}{t^3}$ has the form $\frac{0}{0}$, apply L'Hospital's Rule

$$\overset{H}{=} \lim_{t\to 0} \frac{e^t}{3t^2} = \boxed{\infty}$$ since $e^t \to 1$ and $3t^2 \to 0$

15) $\lim\limits_{x\to\infty} \frac{\ln x}{\sqrt{x}}$ has the form $\frac{\infty}{\infty}$, apply L'Hospital's Rule

$$\overset{H}{=} \lim_{x\to\infty} \frac{\frac{1}{x}}{\frac{1}{2\sqrt{x}}} = \lim_{x\to\infty} \frac{2\sqrt{x}}{x} = \lim_{x\to\infty} \frac{2}{\sqrt{x}} = \boxed{0}$$