

#10

$$= \frac{15}{6} f^{1/2} = 0.4 f^{1/2}$$

$$\frac{14f^{1/5} - 8f^{1/5}}{155}$$

⑥ $t = 1.2h = 0.0001$
 $3 + 3 \times 0.0001 = 3.0003 \rightarrow 3.00030001 = 3.00030001$

⑤ $t = 1.2h = 0.001$
 $3 + 3 \times 0.001 = 3.003 \rightarrow 3.003001 = 3.003001$

④ $t = 1.2h = 0.01$
 $3 \times 10^2 + 3 \times 0.01 = 3.03 \rightarrow 3.0301 = 3.0301$

③ $t = 1.2h = 0.1$
 $3 \times 10^2 + 3 \times 0.1 = 3.3 \rightarrow 3.301 = 3.301$

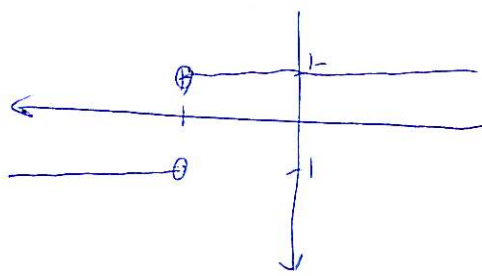
② $t = 1.2h = 1$
 $3 \times 10^2 + 3 \times 1 = 6 + 1 = 7$

$37 \frac{1}{2} + 67h + 4h^2 = 37 \frac{1}{2} + 37.2h + (2h)^2$

① $(t+2h)^3 + t^3 = \frac{2h}{3} + 3t^2 \cdot 2h + 3 \cdot t \cdot 4h^2 + 8h^3$

HWS

2.2 #1



DNE

limit doesn't exist

$$-1 = \frac{4-x}{x-4} = \frac{4-x}{|4-x|} \quad x > 4$$

$$1 = \frac{4-x}{4-x} = \frac{4-x}{|4-x|} \quad x < 4 \quad \#$$

6

approach 6 from left = 0
 right = 0

3

approach 4 from left = 2
 right = 2

2 ≠ 0 DNE

0

approach 2 from right

2

approach 2 from left # 1 2.3

$$\lim_{x \rightarrow \infty} \frac{8 - 8/x - 2/x^2}{2 + 3/x - 9/x^2} = 4$$

$$\lim_{x \rightarrow \infty} \frac{8x^2 - 8x - 2}{2x^2 + 3x - 9}$$

11

$$\lim_{x \rightarrow 0} \sin(x) = 0$$

$$\lim_{x \rightarrow \infty} \sin(1/x) = 0$$

8

$$= 0$$

$$\lim_{x \rightarrow \infty} \frac{4/x}{6 - 8/x^2} = 0$$

$$\lim_{x \rightarrow \infty} \frac{4x^2}{6x^2 - 8} = \frac{\infty}{\infty}$$

(2.4)

$$= 15$$

$$\frac{8^2 + 15 \cdot 8 + 56}{8 + 8} =$$

$$\lim_{x \rightarrow 8} \frac{x^2 + 15x + 56}{x + 8}$$

(3)

$2x-3=0 \Rightarrow x=3/2$
vertical asymptote is $x=3/2$ (Kugels)

$x \neq 3=0 \Rightarrow x=-3$
vertical asymptote is $x=-3$ (Kugels)

The horizontal asymptote is $y=4$

5