X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00001XX Diff01 Answers for No. 9395

$$
\begin{aligned}
& \text { Ans } 1=(k=7), \quad, \quad \text { Ans } 2=(k=3), \quad, \quad A n s 3=\left[\begin{array}{c}
a=-3 \\
b=5
\end{array}\right], \quad, \quad \text { Ans } 4=\left[\begin{array}{l}
a=6 \\
b=8
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
. l=(4,4) \\
.2=(9,39) \\
.3=7 \\
.4=(5,7) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans } 6=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=109] \\
.2=[\mathrm{f}(b)=120.48, h=0.2, \text { RateOfChange }=57.400] \\
.3=[\mathrm{f}(c)=114.67, h=0.1, \text { RateOfChange }=56.700] \\
.4=[\mathrm{f}(d)=109.5607, h=0.01, \text { RateOfChange }=56.070] \\
.5=[\text { RateOfChange at the point } a=56]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[16 \pi], .6=[12 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
. l=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{\sqrt{3}}{4}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right]=[\sqrt{3}], .6=\left[\frac{7 \sqrt{3}}{2}\right]
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00002XX Diff01 Answers for No. 9419

$$
\begin{aligned}
& \text { Ansl }=(k=3), \quad, \quad A n s 2=(k=2), \quad, \quad A n s 3=\left[\begin{array}{c}
a=2 \\
b=-41
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=6 \\
b=2
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(2,8) \\
.2=(4,20) \\
.3=6 \\
.4=(3,13) \\
.5=5 \\
.6=4
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=67] \\
.2=[\mathrm{f}(b)=76.92, h=0.2, \text { RateOfChange }=49.600] \\
.3=[\mathrm{f}(c)=71.88, h=0.1, \text { RateOfChange }=48.800]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
.1=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[14 \pi], .6=[6 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
. l=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{h}{4}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right], 5=[4 \sqrt{3}], .6=\left[\frac{5 \sqrt{3}}{2}\right]
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00003XX Diff01 Answers for No. 9428

$$
\begin{aligned}
& \text { Ansl }=(k=3), \quad, \quad \text { Ans } 2=(k=4), \quad, \quad \text { Ans } 3=\left[\begin{array}{c}
a=-6 \\
b=-37
\end{array}\right], \quad \text { Ans } 4=\left[\begin{array}{l}
a=2 \\
b=7
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(5,5) \\
.2=(8,26) \\
.3=7 \\
.4=(6,10) \\
.5=5 \\
.6=4
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=23] \\
.2=[\mathrm{f}(b)=28.88, h=0.2, \text { RateOfChange }=29.400] \\
.3=[\mathrm{f}(c)=25.87, h=0.1, \text { RateOfChange }=28.700]
\end{array}\right] \\
& \operatorname{Ans} 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \operatorname{Ans} 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[6 \pi], .6=[10 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right.} \\
.3=\left[\frac{h}{4}\right]
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$

X [Page $=0003]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00004XX Diff01 Answers for No. 9459

$$
\begin{aligned}
& \text { Ans } 1=(k=-2), \quad, \quad A n s 2=(k=6), \quad, A n s 3=\left[\begin{array}{l}
a=1 \\
b=2
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=3 \\
b=8
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(2,2) \\
.2=(5,17) \\
.3=5 \\
.4=(3,5) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
.1=[\mathrm{f}(a)=36] \\
.2=[\mathrm{f}(b)=41.88, h=0.2, \text { RateOfChange }=29.400] \\
.3=[\mathrm{f}(c)=38.87, h=0.1, \text { RateOfChange }=28.700] \\
.4=[\mathrm{f}(d)=36.2807, h=0.01, \text { RateOfChange }=28.070] \\
.5=[\text { RateOfChange at the point } a=28]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
.1=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[6 \pi], .6=[14 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
. l=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\begin{array}{c}
\left.\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right] \\
.3=\left[\frac{h}{4}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right], .5=[\sqrt{3}], .6=\left[\frac{7 \sqrt{3}}{2}\right]
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]}
\end{array}\right.
\end{aligned}
$$



X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00005XX Diff01 Answers for No. 9476

$$
\begin{aligned}
& \text { Ansl }=(k=3), \quad, \quad \text { Ans2 }=(k=6), \quad, \quad A n s 3=\left[\begin{array}{l}
a=6 \\
b=1
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=2 \\
b=6
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(4,4) \\
.2=(8,28) \\
.3=6 \\
.4=(5,7) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=52] \\
.2=[\mathrm{f}(b)=58.20, h=0.2, \text { RateOfChange }=31.000] \\
.3=[\mathrm{f}(c)=55.05, h=0.1, \text { RateOfChange }=30.500]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[6 \pi], .6=[12 \pi]]}
\end{array}\right] \\
& \operatorname{Ans} 9=\left[\begin{array}{c}
. l=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{h}{4}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right], 5=[\sqrt{3}], .6=\left[\frac{5 \sqrt{3}}{2}\right]
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00006XX Diff01 Answers for No. 9491

$$
\begin{aligned}
& \text { Ansl }=(k=4), \quad, \quad A n s 2=(k=4), \quad, \quad A n s 3=\left[\begin{array}{l}
a=4 \\
b=2
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=5 \\
b=3
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
. l=(3,8) \\
.2=(6,29) \\
.3=7 \\
.4=(4,13) \\
.5=5 \\
.6=4
\end{array}\right], \quad, \text { Ans } 6=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=26] \\
.2=[\mathrm{f}(b)=30.20, h=0.2, \text { RateOfChange }=21.000] \\
.3=[\mathrm{f}(c)=28.05, h=0.1, \text { RateOfChange }=20.500] \\
.4=[\mathrm{f}(d)=26.2005, h=0.01, \text { RateOfChange }=20.050] \\
.5=[\text { RateOfChange at the point } a=20]
\end{array}\right] \\
& \operatorname{Ans} 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \operatorname{Ans} 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[12 \pi], .6=[10 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
.\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right] \\
.3=\left[\frac{\sqrt{3} x}{2}\right], .5=[3 \sqrt{3}], .6=\left[\frac{5 \sqrt{3}}{2}\right]
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00007XX Diff01 Answers for No. 9633

$$
\begin{aligned}
& \text { Ans } 1=(k=1), \quad, \quad A n s 2=(k=6), \quad, A n s 3=\left[\begin{array}{c}
a=-5 \\
b=1
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=5 \\
b=8
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
. l=(2,2) \\
.2=(6,26) \\
.3=6 \\
.4=(3,5) \\
.5=3 \\
.6=2
\end{array}\right], \quad, A n s 6=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=106] \\
.2=[\mathrm{f}(b)=117.48, h=0.2, \text { RateOfChange }=57.400] \\
.3=[\mathrm{f}(c)=111.67, h=0.1, \text { RateOfChange }=56.700] \\
.4=[\mathrm{f}(d)=106.5607, h=0.01, \text { RateOfChange }=56.070] \\
.5=[\text { RateOfChange at the point } a=56]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], ~ A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[10 \pi], .6=[12 \pi]]}
\end{array}\right] \\
& A n s \theta=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{\sqrt{3}}{4}\right] \\
{\left[4=\left[\frac{\sqrt{3} x}{2}\right], 5=[3 \sqrt{3}], .6=\left[\frac{5 \sqrt{3}}{2}\right]\right.}
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00008XX Diff01 Answers for No. 9711

$$
\begin{aligned}
& \text { Ansl }=(k=7), \quad, \quad A n s 2=(k=6), \quad, A n s 3=\left[\begin{array}{c}
a=-78 \\
b=3
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=2 \\
b=6
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(5,5) \\
.2=(9,37) \\
.3=8 \\
.4=(6,10) \\
.5=5 \\
.6=4
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=51] \\
.2=[\mathrm{f}(b)=57.20, h=0.2, \text { RateOfChange }=31.000] \\
.3=[\mathrm{f}(c)=54.05, h=0.1, \text { RateOfChange }=30.500]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
.1=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[14 \pi], .6=[6 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{h}{2}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right], .5=\left[\frac{7 \sqrt{3}}{2}\right], 6=\left[\frac{5 \sqrt{3}}{2}\right]
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00009XX Diff01 Answers for No. 9784

$$
\begin{aligned}
& \text { Ans1 }=(k=7), \quad, \quad \text { Ans } 2=(k=3), \quad, \quad \text { Ans3 }=\left[\begin{array}{c}
a=2 \\
b=-31
\end{array}\right], \quad, \quad \text { Ans } 4=\left[\begin{array}{l}
a=5 \\
b=3
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(1,4) \\
.2=(6,39) \\
.3=7 \\
.4=(2,7) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=9] \\
.2=[\mathrm{f}(b)=12.36, h=0.2 \text {, RateOfChange }=16.800] \\
.3=[\mathrm{f}(c)=10.64, h=0.1 \text {, RateOfChange }=16.400] \\
.4=[\mathrm{f}(d)=9.1604, h=0.01 \text {, } \text { RateOfChange }=16.040] \\
.5=[\text { RateOfChange at the point } a=16]
\end{array}\right] \\
& \text { Ans } 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \text { Ans } 8=\left[\begin{array}{c}
. l=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[12 \pi], .6=[6 \pi]]}
\end{array}\right] \\
& \text { Ans } 9=\left[\begin{array}{c}
. l=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
.3=\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right] \\
h
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$

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X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM6/1-6600505-00010XX Diff01 Answers for No. 10143

$$
\begin{aligned}
& \text { Ansl }=(k=7), \quad, \quad A n s 2=(k=4), \quad, \quad A n s 3=\left[\begin{array}{l}
a=5 \\
b=1
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=4 \\
b=6
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
. l=(2,6) \\
.2=(5,27) \\
.3=7 \\
.4=(3,11) \\
.5=5 \\
.6=4
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=106] \\
.2=[\mathrm{f}(b)=117.48, h=0.2, \text { RateOfChange }=57.400] \\
.3=[\mathrm{f}(c)=111.67, h=0.1, \text { RateOfChange }=56.700] \\
.4=[\mathrm{f}(d)=106.5607, h=0.01, \text { RateOfChange }=56.070] \\
.5=[\text { RateOfChange at the point } a=56]
\end{array}\right] \\
& \operatorname{Ans} 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \operatorname{Ans} 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[6 \pi], .6=[4 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{h}{4}\right]
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



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$$
\begin{aligned}
& \text { Ansl }=(k=5), \quad, \quad A n s 2=(k=4), \quad, \quad A n s 3=\left[\begin{array}{l}
a=2 \\
b=1
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=2 \\
b=7
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(4,8) \\
.2=(6,20) \\
.3=6 \\
.4=(5,13) \\
.5=5 \\
.6=4
\end{array}\right], \quad, \text { Ans } 6=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=25] \\
.2=[\mathrm{f}(b)=31.72, h=0.2, \text { RateOfChange }=33.600] \\
.3=[\mathrm{f}(c)=28.28, h=0.1, \text { RateOfChange }=32.800]
\end{array}\right] \\
& \operatorname{Ans} 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \operatorname{Ans} 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[14 \pi], .6=[10 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{\sqrt{3}}{4}\right] \\
{\left[4=\left[\frac{\sqrt{3} x}{2}\right], 5=[3 \sqrt{3}], .6=[4 \sqrt{3}]\right.}
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$

x [Page = 0011] XxXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

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$$
\begin{aligned}
& \text { Ansl }=(k=2), \quad, \quad A n s 2=(k=4), \quad, \quad A n s 3=\left[\begin{array}{l}
a=46 \\
b=-7
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=4 \\
b=2
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
. l=(3,8) \\
.2=(7,32) \\
.3=6 \\
.4=(4,11) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=17] \\
.2=[\mathrm{f}(b)=22.04, h=0.2, \text { RateOfChange }=25.200] \\
.3=[\mathrm{f}(c)=19.46, h=0.1, \text { RateOfChange }=24.600] \\
.4=[\mathrm{f}(d)=17.2406, h=0.01, \text { RateOfChange }=24.060] \\
.5=[\text { RateOfChange at the point } a=24]
\end{array}\right] \\
& \operatorname{Ans} 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \operatorname{Ans} 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[14 \pi], .6=[10 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
.\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right] \\
.3=\left[\frac{\sqrt{3} x}{2}\right], .5=[3 \sqrt{3}], .6=[\sqrt{3}]
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



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$$
\begin{aligned}
& \text { Ansl }=(k=-4), \quad, \quad \text { Ans } 2=(k=5), \quad, \quad \text { Ans3 } 3=\left[\begin{array}{c}
a=-49 \\
b=2
\end{array}\right], \quad, \quad \text { Ans } 4=\left[\begin{array}{l}
a=7 \\
b=5
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(2,7) \\
.2=(5,22) \\
.3=5 \\
.4=(3,10) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
.1=[\mathrm{f}(a)=55] \\
.2=[\mathrm{f}(b)=63.68, h=0.2, \text { RateOfChange }=43.400] \\
.3=[\mathrm{f}(c)=59.27, h=0.1, \text { RateOfChange }=42.700] \\
.4=[\mathrm{f}(d)=55.4207, h=0.01, \text { RateOfChange }=42.070] \\
.5=[\text { RateOfChange at the point } a=42]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
.1=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[14 \pi], .6=[8 \pi]]}
\end{array}\right] \\
& A n s \theta=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
.\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right] \\
.3=\left[\frac{h}{4}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right], .5=\left[\frac{5 \sqrt{3}}{2}\right], .6=[\sqrt{3}]
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



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$$
\begin{aligned}
& \text { Ansl }=(k=4), \quad, \quad A n s 2=(k=3), \quad, \quad A n s 3=\left[\begin{array}{c}
a=3 \\
b=-53
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=6 \\
b=3
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(3,7) \\
.2=(6,28) \\
.3=7 \\
.4=(4,12) \\
.5=5 \\
.6=4
\end{array}\right], \quad, A n s 6=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=43] \\
.2=[\mathrm{f}(b)=47.92, h=0.2, \text { RateOfChange }=24.600] \\
.3=[\mathrm{f}(c)=45.43, h=0.1, \text { RateOfChange }=24.300]
\end{array}\right] \\
& \operatorname{Ans} 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \operatorname{Ans} 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[4 \pi], .6=[6 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\begin{array}{c}
\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4} \\
.3=\left[\frac{h}{2}\right], .5=\left[\frac{3 \sqrt{3}}{2}\right] \\
{\left[4=\left[\frac{\sqrt{3} x}{2}\right]\right.}
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]}
\end{array}\right.
\end{aligned}
$$



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$$
\begin{aligned}
& \text { Ansl }=(k=3), \quad, \quad A n s 2=(k=5), \quad, A n s 3=\left[\begin{array}{c}
a=-1 \\
b=-32
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=4 \\
b=2
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(3,9) \\
.2=(6,30) \\
.3=7 \\
.4=(4,14) \\
.5=5 \\
.6=4
\end{array}\right], \quad, \text { Ans } 6=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=31] \\
.2=[\mathrm{f}(b)=35.96, h=0.2, \text { RateOfChange }=24.800] \\
.3=[\mathrm{f}(c)=33.44, h=0.1, \text { RateOfChange }=24.400]
\end{array}\right] \\
& \operatorname{Ans} 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \operatorname{Ans} 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[12 \pi], .6=[10 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{\sqrt{2}}{4}\right] \\
{\left[4=\left[\frac{\sqrt{3} x}{2}\right], 5=[3 \sqrt{3}], .6=[4 \sqrt{3}]\right.}
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



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$$
\begin{aligned}
& \text { Ansl }=(k=49), \quad, \quad \text { Ans } 2=(k=6), \quad, \quad A n s 3=\left[\begin{array}{c}
a=1 \\
b=-64
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=8 \\
b=3
\end{array}\right] \\
& \text { Ans5 }=\left[\begin{array}{c}
.1=(3,8) \\
.2=(8,43) \\
.3=7 \\
.4=(4,11) \\
.5=3 \\
.6=2
\end{array}\right], \\
& {[\quad .1=[\mathrm{f}(a)=33]} \\
& \text { Ans6 } \quad .2=[\mathrm{f}(b)=37.96, h=0.2 \text {, RateOfChange }=24.800] \\
& \text { Ans6 }=.3=[\mathrm{f}(c)=35.44, h=0.1 \text {, RateOfChange }=24.400] \\
& \begin{aligned}
.4=[\mathrm{f}(d) & =33.2404, h=0.01, \text { RateOfChange }=24.040] \\
.5 & =[\text { RateOfChange at the point } a=24]
\end{aligned} \\
& A n s 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[12 \pi], .6=[16 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{\sqrt{3} x}{2}\right], .5=[2 \sqrt{3}], .6=[4 \sqrt{3}]
\end{array}\right], \\
& ,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



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$$
\begin{aligned}
& \text { Ans } 1=(k=-5), \quad, \quad A n s 2=(k=2), \quad, A n s 3=\left[\begin{array}{l}
a=3 \\
b=1
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=2 \\
b=7
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(1,4) \\
.2=(4,19) \\
.3=5 \\
.4=(2,7) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
.1=[\mathrm{f}(a)=123] \\
.2=[\mathrm{f}(b)=136.12, h=0.2, \text { RateOfChange }=65.600] \\
.3=[\mathrm{f}(c)=129.48, h=0.1, \text { RateOfChange }=64.800] \\
.4=[\mathrm{f}(d)=123.6408, h=0.01, \text { RateOfChange }=64.080] \\
.5=[\text { RateOfChange at the point } a=64]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
.1=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[8 \pi], .6=[4 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\begin{array}{c}
\left.\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right] \\
.3=\left[\frac{h}{4}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right], 5=\left[\frac{5 \sqrt{3}}{2}\right], 6=\left[\frac{7 \sqrt{3}}{2}\right]
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]}
\end{array}\right.
\end{aligned}
$$



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$$
\begin{aligned}
& \text { Ans } 1=(k=3), \quad, \quad A n s 2=(k=2), \quad, \quad A n s 3=\left[\begin{array}{c}
a=-3 \\
b=3
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=8 \\
b=6
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
. l=(1,6) \\
.2=(5,30) \\
.3=6 \\
.4=(2,9) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=117] \\
.2=[\mathrm{f}(b)=128.48, h=0.2, \text { RateOfChange }=57.400] \\
.3=[\mathrm{f}(c)=122.67, h=0.1, \text { RateOfChange }=56.700] \\
.4=[\mathrm{f}(d)=117.5607, h=0.01, \text { RateOfChange }=56.070] \\
.5=[\text { RateOfChange at the point } a=56]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[10 \pi], .6=[16 \pi]]}
\end{array}\right] \\
& \text { Ans } 9=\left[\begin{array}{c}
. l=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
.\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right] \\
.3=\left[\frac{h}{4}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right], .5=\left[\frac{5 \sqrt{3}}{2}\right], 6=[2 \sqrt{3}]
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



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$$
\begin{aligned}
& \text { Ans } 1=(k=2), \quad, \quad \text { Ans } 2=(k=2), \quad, \quad \text { Ans } 3=\left[\begin{array}{l}
a=-1 \\
b=-2
\end{array}\right], \quad \text { Ans } 4=\left[\begin{array}{l}
a=8 \\
b=4
\end{array}\right] \\
& \text { Ans5 }=\left[\begin{array}{c}
.1=(4,4) \\
.2=(7,19) \\
.3=5 \\
.4=(5,7) \\
.5=3 \\
.6=2
\end{array}\right] \text {, } \\
& {\left[\begin{array}{l}
.1=[\mathrm{f}(a)=55]
\end{array}\right.} \\
& \text { Ans } 6=.2=[\mathrm{f}(b)=59.92, h=0.2, \text { RateOfChange }=24.600] \\
& \text { Ans6 = } \\
& \begin{array}{l}
.3=[\mathrm{f}(c)=57.43, h=0.1, \text { RateOfChange }=24.300] \\
4=[\mathrm{f}(d)=55.2403, h=0.01, \text { RateOfChange }=24.030]
\end{array} \\
& .5=[\text { RateOfChange at the point } a=24] \\
& A n s 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[14 \pi], .6=[12 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
. l=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\begin{array}{c}
\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4} \\
.3=\left[\frac{h}{2}\right]
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]} \\
{\left[4=\left[\frac{\sqrt{3} x}{2}\right], 5=[2 \sqrt{3}], .6=\left[\frac{7 \sqrt{3}}{2}\right]\right.}
\end{array}\right]
\end{aligned}
$$



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$$
\begin{aligned}
& \text { Ansl }=(k=5), \quad, \quad A n s 2=(k=6), \quad, A n s 3=\left[\begin{array}{c}
a=34 \\
b=3
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=4 \\
b=2
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
. l=(3,5) \\
.2=(6,20) \\
.3=5 \\
.4=(4,8) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans } 0=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=118] \\
.2=[\mathrm{f}(b)=129.48, h=0.2, \text { RateOfChange }=57.400] \\
.3=[\mathrm{f}(c)=123.67, h=0.1, \text { RateOfChange }=56.700] \\
.4=[\mathrm{f}(d)=118.5607, h=0.01, \text { RateOfChange }=56.070] \\
.5=[\text { RateOfChange at the point } a=56]
\end{array}\right] \\
& \operatorname{Ans} 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \operatorname{Ans} 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[8 \pi], 6=[10 \pi]]}
\end{array}\right] \\
& \operatorname{Ans} 9=\left[\begin{array}{c}
. l=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{h}{4}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right], .5=\left[\frac{3 \sqrt{3}}{2}\right], 6=[\sqrt{3}]
\end{array}\right]
\end{aligned}
$$

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$$
\begin{aligned}
& \text { Ansl }=(k=4), \quad, \quad A n s 2=(k=5), \quad, \quad A n s 3=\left[\begin{array}{c}
a=2 \\
b=36
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=2 \\
b=8
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
.1=(1,4) \\
.2=(6,39) \\
.3=7 \\
.4=(2,7) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans6 }=\left[\begin{array}{c}
.1=[\mathrm{f}(a)=91] \\
.2=[\mathrm{f}(b)=100.84, h=0.2, \text { RateOfChange }=49.200] \\
.3=[\mathrm{f}(c)=95.86, h=0.1, \text { RateOfChange }=48.600] \\
.4=[\mathrm{f}(d)=91.4806, h=0.01, \text { RateOfChange }=48.060] \\
.5=[\text { RateOfChange at the point } a=48]
\end{array}\right] \\
& \operatorname{Ans} 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], \quad, \operatorname{Ans} 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[8 \pi], 6=[16 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
. l=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\begin{array}{c}
\left.\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right] \\
.3=\left[\frac{h}{4}\right] \\
.4=\left[\frac{\sqrt{3} x}{2}\right], .5=\left[\frac{5 \sqrt{3}}{2}\right], .6=[2 \sqrt{3}]
\end{array}\right], \quad,\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]}
\end{array}\right.
\end{aligned}
$$

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$$
\begin{aligned}
& \text { Ansl }=(k=29), \quad, \quad A n s 2=(k=6), \quad, \quad A n s 3=\left[\begin{array}{l}
a=3 \\
b=1
\end{array}\right], \quad, \quad A n s 4=\left[\begin{array}{l}
a=7 \\
b=4
\end{array}\right] \\
& \text { Ans } 5=\left[\begin{array}{c}
. l=(3,2) \\
.2=(8,37) \\
.3=7 \\
.4=(4,5) \\
.5=3 \\
.6=2
\end{array}\right], \quad, \text { Ans } 6=\left[\begin{array}{c}
. l=[\mathrm{f}(a)=52] \\
.2=[\mathrm{f}(b)=58.20, h=0.2, \text { RateOfChange }=31.000] \\
.3=[\mathrm{f}(c)=55.05, h=0.1, \text { RateOfChange }=30.500] \\
.4=[\mathrm{f}(d)=52.3005, h=0.01, \text { RateOfChange }=30.050] \\
.5=[\text { RateOfChange at the point } a=30]
\end{array}\right] \\
& A n s 7=\left[\begin{array}{c}
. l=[\mathrm{f}(r)=2 \pi r] \\
.2=[\mathrm{f}(r+h)=2 \pi(r+h)] \\
.3=\left[\frac{2 \pi(r+h)-2 \pi r}{h}\right] \\
{[.4=[2 \pi], .5=[2 \pi], .6=[2 \pi]]}
\end{array}\right], A n s 8=\left[\begin{array}{c}
.1=\left[\mathrm{f}(r)=\pi r^{2}\right] \\
.2=\left[\mathrm{f}(r+h)=\pi(r+h)^{2}\right] \\
.3=\left[\frac{\pi(r+h)^{2}-\pi r^{2}}{h}\right] \\
{[.4=[2 \pi r], .5=[14 \pi], .6=[16 \pi]]}
\end{array}\right] \\
& A n s 9=\left[\begin{array}{c}
.1=\left[\mathrm{f}(x)=\frac{\sqrt{3} x^{2}}{4}\right] \\
.2=\left[\mathrm{f}(x+h)=\frac{\sqrt{3}(x+h)^{2}}{4}\right] \\
{\left[\frac{\sqrt{3}(x+h)^{2}}{4}-\frac{\sqrt{3} x^{2}}{4}\right]} \\
.3=\left[\frac{\sqrt{3}}{4}\right] \\
{\left[4=\left[\frac{\sqrt{3} x}{2}\right], 5=[2 \sqrt{3}], .6=[3 \sqrt{3}]\right.}
\end{array}\right],\left[\begin{array}{c}
M \\
a \\
t \\
h \\
@ \\
M \\
U \\
T
\end{array}\right]
\end{aligned}
$$



##  [ $>$

