

$$
\left[\begin{array}{c}
. I=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { AreaR }=x(x+7)
\end{array}\right] \\
.3=120 \\
4=7 \\
.5=\left[\begin{array}{l}
A S=121 \\
A R=198
\end{array}\right] \\
.6=[\mathrm{f}(x)=7 x]
\end{array}\right]
$$

x [Page $=0001]$ xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00002XX Function03 Answers for No. 9707

Ans1 : . 1 > blue
: . 2 > black
: . 3 > yellow
: . 4 > gray
: . 5 > green
: . 6 > red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 0) | (-infinity, 4) | (-1,infinity) | (-infinity, 1 ) |
| . 4 | $(7,0)$ | $(4,0),(8,0)$ | $(3,0),(5,0)$ | $(-7,0),(-5,0)$ |
| . 5 | $(7,0)$ | $(6,4)$ | $(4,-1)$ | $(-6,1)$ |
| . 6 | Maximum | Maximum | Minimum | Maximum |
| . 7 | $\max =0$ | $\max =4$ | $\min =-1$ | $\max =1$ |

$$
A n s 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(300-0.5 x) x] \\
.2=[300.00,45000]
\end{array}\right], A n s 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(6000+500 x)(130-x)] \\
.2=\{11500,59500\} \\
.3=[35500,2520500]
\end{array}\right], A n s 8=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+8)
\end{array}\right]
$$

$\mathrm{X}[$ Page $=0002$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00003XX Function03 Answers for No. 9821

Ans1 : . 1 > blue
:. $2>$ gray
: . 3 > red
. . $4>$ yellow
: . $5>$ black
: . 6 > green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (-1, infinity) | (-infinity, 0) | (-25, infinity) | (-infinity, 36) |
| . 4 | $(6,0),(8,0)$ | $(-3,0)$ | $(-2,0),(8,0)$ | $(-7,0),(5,0)$ |
| . 5 | $(7,-1)$ | $(-3,0)$ | $(3,-25)$ | $(-1,36)$ |
| . 6 | Minimum | Maximum | Minimum | Maximum |
| . 7 | $\min =-1$ | $\max =0$ | $\min =-25$ | $\max =36$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+7)
\end{array}\right] \\
.3=78 \\
.4=8 \\
.5=\left[\begin{array}{c}
A S=100 \\
A R=170
\end{array}\right] \\
.6=[\mathrm{f}(x)=7 x]
\end{array}\right]
$$

x [Page $=0003$ ] xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00004XX Function03 Answers for No. 10352

Ans1 : . 1 > green
: . 2 > blue
: . 3 > yellow
: . 4 > red
: . $5>$ black
: . 6 > gray

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (0,infinity) | (-4,infinity) | (-infinity, 1 ) | (-infinity, 9) |
| . 4 | $(-2,0)$ | $(-4,0),(0,0)$ | $(4,0),(6,0)$ | $(2,0),(8,0)$ |
| . 5 | $(-2,0)$ | $(-2,-4)$ | $(5,1)$ | $(5,9)$ |
| . 6 | Minimum | Minimum | Maximum | Maximum |
| . 7 | $\min =0$ | $\min =-4$ | $\max =1$ | $\max =9$ |

$$
\text { Ans } \left.6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(600-0.4 x) x] \\
.2=[750.00,225000]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(4000+200 x)(100-x)] \\
.2=\{7000,17000\} \\
.3=[12000,720000]
\end{array}\right], A n s 8=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { AreaR }=x(x+11)
\end{array}\right] \begin{array}{c}
.3=42 \\
.4=10 \\
.5=\left[\begin{array}{c}
A S=36 \\
A R=102
\end{array}\right] \\
.6=[\mathrm{f}(x)=11 x]
\end{array}\right]
$$

[^0]X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00005XX Function03 Answers for No. 10380

Ans1 : . 1 > red
:. $2>$ gray
: . 3 > blue
:. $4>$ black
: . $5>$ yellow
: . 6 > green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity, infinity) |
| . 3 | (-infinity, 16) | (-1, infinity) | (-49, infinity) | (0, infinity) |
| . 4 | $(-1,0),(7,0)$ | $(4,0),(6,0)$ | $(-6,0),(8,0)$ | $(-9,0)$ |
| . 5 | $(3,16)$ | $(5,-1)$ | $(1,-49)$ | $(-9,0)$ |
| . 6 | Maximum | Minimum | Minimum | Minimum |
| . 7 | $\max =16$ | $\min =-1$ | $\min =-49$ | $\min =0$ |

$$
\left[\begin{array}{c}
. l=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { AreaR }=x(x+7)
\end{array}\right] \\
.3=8 \\
.4=9 \\
.5=\left[\begin{array}{l}
A S=36 \\
A R=78
\end{array}\right] \\
.6=[\mathrm{f}(x)=7 x]
\end{array}\right]
$$

x [Page $=0005$ ] xXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00006XX Function03 Answers for No. 10412

Ans1 : . 1 > blue
: . 2 > black
: . 3 > green
: . 4 > yellow
: . $5>\mathrm{red}$
: . 6 > gray

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 4) | (-infinity, 0) | (-1, infinity) | (-infinity, 36) |
| . 4 | $(-3,0),(1,0)$ | $(-7,0)$ | $(-4,0),(-2,0)$ | $(-5,0),(7,0)$ |
| . 5 | $(-1,4)$ | $(-7,0)$ | $(-3,-1)$ | $(1,36)$ |
| . 6 | Maximum | Maximum | Minimum | Maximum |
| . 7 | $\max =4$ | $\max =0$ | $\min =-1$ | $\max =36$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+9)
\end{array}\right] \\
.3=112 \\
.4=4 \\
.5=\left[\begin{array}{l}
A S=36 \\
A R=90
\end{array}\right] \\
.6=[\mathrm{f}(x)=9 x]
\end{array}\right]
$$

X [Page $=0006]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00007XX Function03 Answers for No. 10487

Ans1 : . 1 > yellow
: . $2>$ green
: . 3 > gray
. . 4 > black
: . $5>$ blue
: . $6>\mathrm{red}$

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) |
| . 3 | (-infinity, 9) | (-infinity, 0) | (-infinity, 1 ) | (-4,infinity) |
| . 4 | $(2,0),(8,0)$ | $(5,0)$ | $(3,0),(5,0)$ | $(0,0),(4,0)$ |
| . 5 | $(5,9)$ | $(5,0)$ | $(4,1)$ | $(2,-4)$ |
| . 6 | Maximum | Maximum | Maximum | Minimum |
| . 7 | $\max =9$ | $\max =0$ | $\max =1$ | $\min =-4$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(300-0.3 x) x] \\
.2=[500.00,75000]
\end{array}\right], \text { Ans } 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(6000+500 x)(100-x)] \\
.2=\{13000,43000\} \\
.3=[28000,1568000]
\end{array}\right], \text { Ans } 8=
$$

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { AreaR }=x(x+10)
\end{array}\right] \\
.3=231 \\
.4=11 \\
.5=\left[\begin{array}{l}
A S=100 \\
A R=200
\end{array}\right] \\
.6=[\mathrm{f}(x)=10 x]
\end{array}\right]
$$

[^1]X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00008XX Function03 Answers for No. 10644

Ans1 : . 1 > red
:. $2>$ black
: . $3>$ blue
. . $4>$ yellow
: . 5 > gray
: . 6 > green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 25) | (-infinity, 1) | (-infinity, 0) | (-9,infinity) |
| . 4 | $(-2,0),(8,0)$ | $(-3,0),(-1,0)$ | $(-9,0)$ | $(-5,0),(1,0)$ |
| . 5 | $(3,25)$ | $(-2,1)$ | $(-9,0)$ | $(-2,-9)$ |
| . 6 | Maximum | Maximum | Maximum | Minimum |
| . 7 | $\max =25$ | $\max =1$ | $\max =0$ | $\min =-9$ |

$$
=\left[\begin{array}{c}
. l=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+2)
\end{array}\right] \\
.3=63 \\
.4=10 \\
.5=\left[\begin{array}{l}
A S=64 \\
A R=80
\end{array}\right] \\
.6=[\mathrm{f}(x)=2 x]
\end{array}\right]
$$

x [Page $=0008$ ] xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```
    Ans1 : .1 > red
```

        :. \(.2>\) green
        : . 3 > black
        : . 4 > gray
        : . 5 > blue
        : . 6 > yellow
    | Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 81) | (-infinity, 0) | (-infinity, 4) | (-49, infinity) |
| . 4 | $(-9,0),(9,0)$ | $(6,0)$ | $(-3,0),(1,0)$ | $(-7,0),(7,0)$ |
| . 5 | $(0,81)$ | $(6,0)$ | $(-1,4)$ | $(0,-49)$ |
| . 6 | Maximum | Maximum | Maximum | Minimum |
| . 7 | $\max =81$ | $\max =0$ | $\max =4$ | $\min =-49$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(300-0.4 x) x] \\
.2=[375.00,56250]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(3000+300 x)(90-x)] \\
.2=\{6900,23100\} \\
.3=[15000,750000]
\end{array}\right], \text { Ans } 8=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
.1=\left[\begin{array}{c}
\text { AreaR }=x(x+11)
\end{array}\right] \\
.3=80 \\
.4=7 \\
.5=\left[\begin{array}{c}
A S=36 \\
A R=102
\end{array}\right] \\
.6=[\mathrm{f}(x)=11 x]
\end{array}\right]
$$

X [Page $=0009$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00010XX Function03 Answers for No. 11613

Ans1 : . 1 > black
: . 2 > gray
: . 3 > green
. . $4>$ yellow
:. $5>$ red
: . 6 > blue

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) |
| . 3 | ( -1, infinity) | (-infinity, 0) | (-16, infinity) | (-infinity, 36) |
| . 4 | $(-4,0),(-2,0)$ | $(-6,0)$ | $(-3,0),(5,0)$ | $(-6,0),(6,0)$ |
| . 5 | $(-3,-1)$ | $(-6,0)$ | $(1,-16)$ | $(0,36)$ |
| . 6 | Minimum | Maximum | Minimum | Maximum |
| . 7 | $\min =-1$ | $\max =0$ | $\min =-16$ | $\max =36$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(600-0.4 x) x] \\
.2=[750.00,225000]
\end{array}\right], \text { Ans } 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(6000+200 x)(90-x)] \\
.2=\{9800,14200\} \\
.3=[12000,720000]
\end{array}\right], \text { Ans } 8=\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+6)
\end{array}\right] \\
.3=40 \\
.4=7 \\
.4=\left[\begin{array}{c}
A S=121 \\
A R=187
\end{array}\right] \\
.6=[\mathrm{f}(x)=6 x]
\end{array}\right]
$$

X [Page $=0010]$ xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
: $.2>$ gray
: . $3>$ yellow
. 4 > green
: . $5>$ blue
:. $6>$ black

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-9,infinity) | (-infinity, 36) | (-infinity,0) | (-1, infinity) |
| . 4 | $(-2,0),(4,0)$ | $(-5,0),(7,0)$ | $(-2,0)$ | $(2,0),(4,0)$ |
| . 5 | $(1,-9)$ | $(1,36)$ | $(-2,0)$ | $(3,-1)$ |
| . 6 | Minimum | Maximum | Maximum | Minimum |
| . 7 | $\min =-9$ | $\max =36$ | $\max =0$ | $\min =-1$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { Area }=x(x+5)
\end{array}\right] \\
.3=104 \\
4=3 \\
.\left[\begin{array}{c}
A S=9 \\
A R=24
\end{array}\right] \\
.6=[\mathrm{f}(x)=5 x]
\end{array}\right]
$$

X [Page $=0011]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00012XX Function03 Answers for No. 12122

Ans1 : . 1 > yellow
: . $2>$ blue
: . 3 > black
. . $4>$ green
: . 5 > gray
: . $6>$ red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 25) | (-36,infinity) | (-infinity, 25) | (0,infinity) |
| . 4 | $(-2,0),(8,0)$ | $(-6,0),(6,0)$ | $(-8,0),(2,0)$ | $(-4,0)$ |
| . 5 | $(3,25)$ | $(0,-36)$ | $(-3,25)$ | $(-4,0)$ |
| . 6 | Maximum | Minimum | Maximum | Minimum |
| . 7 | $\max =25$ | $\min =-36$ | $\max =25$ | $\min =0$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { AreaR }=x(x+4)
\end{array}\right] \\
.3=96 \\
4=9 \\
.\left[\begin{array}{l}
A S=36 \\
A R=60
\end{array}\right] \\
.6=[\mathrm{f}(x)=4 x]
\end{array}\right]
$$

X [Page $=0012]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00013XX Function03 Answers for No. 12133

Ans1 : . 1 > green
: $.2>$ gray
: . 3 > blue
: . 4 > red
: . $5>$ black
: . 6 > yellow

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity, infinity) |
| . 3 | (-16, infinity) | (-infinity, 25) | (-36, infinity) | (0,infinity) |
| . 4 | $(-7,0),(1,0)$ | $(-4,0),(6,0)$ | $(-8,0),(4,0)$ | $(-1,0)$ |
| . 5 | $(-3,-16)$ | $(1,25)$ | $(-2,-36)$ | $(-1,0)$ |
| . 6 | Minimum | Maximum | Minimum | Minimum |
| . 7 | $\min =-16$ | $\max =25$ | $\min =-36$ | $\min =0$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(700-0.7 x) x] \\
.2=[500.00,175000]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(6000+300 x)(90-x)] \\
.2=\{11400,21600\} \\
.3=[16500,907500]
\end{array}\right], A n s 8=\left[\begin{array}{c}
.1=\left[\begin{array}{l}
\text { AreaR }=x(x+5 \\
.3=36
\end{array}\right. \\
.4=4 \\
.5=\left[\begin{array}{l}
A S=144 \\
A R=204
\end{array}\right] \\
.6=[\mathrm{f}(x)=5 x]
\end{array}\right.
$$

[^2]X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00014XX Function03 Answers for No. 12317

Ans1 : . 1 > yellow
: . $2>$ black
: . $3>$ blue
: . 4 > gray
: . $5>$ red
: . 6 > green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (0,infinity) | (-infinity, 16) | ( -4 , infinity) | (-infinity, 16) |
| . 4 | $(-1,0)$ | $(-6,0),(2,0)$ | $(1,0),(5,0)$ | $(1,0),(9,0)$ |
| . 5 | $(-1,0)$ | $(-2,16)$ | $(3,-4)$ | $(5,16)$ |
| . 6 | Minimum | Maximum | Minimum | Maximum |
| . 7 | $\min =0$ | $\max =16$ | $\min =-4$ | $\max =16$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(300-0.4 x) x] \\
.2=[375.00,56250]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(4000+500 x)(70-x)] \\
.2=\{14500,24500\} \\
.3=[19500,760500]
\end{array}\right], A n s 8=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+4)
\end{array}\right]
$$

x [Page = 0014] xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00015XX Function03 Answers for No. 12380

Ans1 : . 1 > green
: . 2 > black
: . 3 > red
. . $4>$ yellow
: . 5 > blue
: . 6 > gray

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-9,infinity) | (-infinity, 0) | (-16,infinity) | (-infinity, 49) |
| . 4 | $(-2,0),(4,0)$ | $(-9,0)$ | $(-5,0),(3,0)$ | $(-6,0),(8,0)$ |
| . 5 | $(1,-9)$ | $(-9,0)$ | $(-1,-16)$ | $(1,49)$ |
| . 6 | Minimum | Maximum | Minimum | Maximum |
| . 7 | $\min =-9$ | $\max =0$ | $\min =-16$ | $\max =49$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+3)
\end{array}\right] \\
.3=154 \\
.4=6 \\
.5=\left[\begin{array}{c}
A S=9 \\
A R=18
\end{array}\right] \\
.6=[\mathrm{f}(x)=3 x]
\end{array}\right]
$$

X [Page $=0015]$ xXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00016XX Function03 Answers for No. 12554

Ans1 : . 1 > red
: $.2>$ gray
: . 3 > black
. . 4 > yellow
: . $5>$ green
: . 6 > blue

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-49,infinity) | (-16,infinity) | (-infinity, 0 ) | (-infinity,16) |
| . 4 | $(-8,0),(6,0)$ | $(0,0),(8,0)$ | $(-4,0)$ | $(-6,0),(2,0)$ |
| . 5 | $(-1,-49)$ | $(4,-16)$ | $(-4,0)$ | $(-2,16)$ |
| . 6 | Minimum | Minimum | Maximum | Maximum |
| . 7 | $\min =-49$ | $\min =-16$ | $\max =0$ | $\max =16$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(600-0.6 x) x] \\
.2=[500.00,150000]
\end{array}\right], \text { Ans } 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(7000+500 x)(70-x)] \\
.2=\{12500,29500\} \\
.3=[21000,882000]
\end{array}\right], \text { Ans } 8=
$$

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+3)
\end{array}\right] \\
.3=130 \\
.4=10 \\
.5=\left[\begin{array}{l}
A S=169 \\
A R=208
\end{array}\right] \\
.6=[\mathrm{f}(x)=3 x]
\end{array}\right]
$$

X [Page $=0016]$ xXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00017XX Function03 Answers for No. 12836

Ans1 : . 1 > yellow
: . 2 > blue
: . $3>$ red
: . 4 > black
: . 5 > gray
: . $6>$ green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 0) | (-infinity, 9) | (-1, infinity) | (-infinity, 36) |
| . 4 | $(3,0)$ | $(-1,0),(5,0)$ | $(-5,0),(-3,0)$ | $(-4,0),(8,0)$ |
| . 5 | $(3,0)$ | $(2,9)$ | $(-4,-1)$ | $(2,36)$ |
| . 6 | Maximum | Maximum | Minimum | Maximum |
| . 7 | $\max =0$ | $\max =9$ | $\min =-1$ | $\max =36$ |

$$
\text { Ans } \sigma=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(500-0.2 x) x] \\
.2=[1250.00,312500]
\end{array}\right], \text { Ans } 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(6000+600 x)(110-x)] \\
.2=\{14400,57600\} \\
.3=[36000,2160000]
\end{array}\right], \text { Ans } 8=
$$

$$
\left[\begin{array}{c}
. l=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { AreaR }=x(x+11)
\end{array}\right] \\
.3=180 \\
.4=13 \\
.5=\left[\begin{array}{l}
A S=144 \\
A R=276
\end{array}\right] \\
.6=[\mathrm{f}(x)=11 x]
\end{array}\right]
$$

X [Page $=0017]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00018XX Function03 Answers for No. 12959

Ans1 : . 1 > yellow
: $.2>$ blue
: . 3 > gray
. . $4>$ red
:. $5>$ green
: . 6 > black

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 64) | (-1, infinity) | (-infinity, 0) | (-4,infinity) |
| . 4 | $(-8,0),(8,0)$ | $(-1,0),(1,0)$ | $(-6,0)$ | $(-7,0),(-3,0)$ |
| . 5 | $(0,64)$ | $(0,-1)$ | $(-6,0)$ | $(-5,-4)$ |
| . 6 | Maximum | Minimum | Maximum | Minimum |
| . 7 | $\max =64$ | $\min =-1$ | $\max =0$ | $\min =-4$ |

$$
\left[\begin{array}{c}
. l=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+1)
\end{array}\right] \\
.3=2 \\
.4=3 \\
.5=\left[\begin{array}{l}
A S=81 \\
A R=90
\end{array}\right] \\
.6=[\mathrm{f}(x)=x]
\end{array}\right]
$$

X [Page $=0018]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00019XX Function03 Answers for No. 12967

Ans1 : . 1 > black
: . $2>$ blue
: . 3 > gray
. . $4>$ yellow
: . $5>$ green
:. $6>$ red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity,1) | (-infinity, 4) | (-4,infinity) | (-infinity,0) |
| . 4 | $(6,0),(8,0)$ | $(3,0),(7,0)$ | $(-1,0),(3,0)$ | $(4,0)$ |
| . 5 | $(7,1)$ | $(5,4)$ | $(1,-4)$ | $(4,0)$ |
| . 6 | Maximum | Maximum | Minimum | Maximum |
| . 7 | $\max =1$ | $\max =4$ | $\min =-4$ | $\max =0$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+2)
\end{array}\right] \\
.3=8 \\
.4=10 \\
.5=\left[\begin{array}{l}
A S=144 \\
A R=168
\end{array}\right] \\
.6=[\mathrm{f}(x)=2 x]
\end{array}\right]
$$

X [Page $=0019]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00020XX Function03 Answers for No. 12975

Ans1 : . 1 > green
: . 2 > yellow
: . 3 > blue
: . 4 > gray
: . 5 > black
: . 6 > red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-16, infinity) | (-infinity, 9) | (-infinity, 25) | (-infinity, 0) |
| . 4 | $(-7,0),(1,0)$ | $(-2,0),(4,0)$ | $(-8,0),(2,0)$ | $(-9,0)$ |
| . 5 | $(-3,-16)$ | $(1,9)$ | $(-3,25)$ | $(-9,0)$ |
| . 6 | Minimum | Maximum | Maximum | Maximum |
| . 7 | $\min =-16$ | $\max =9$ | $\max =25$ | $\max =0$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+9)
\end{array}\right] \\
.3=220 \\
.4=9 \\
.5=\left[\begin{array}{c}
A S=144 \\
A R=252
\end{array}\right] \\
.6=[\mathrm{f}(x)=9 x]
\end{array}\right]
$$

x [Page = 0020] xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00021XX Function03 Answers for No. 12979

Ans1 : . 1 > gray
: . 2 > green
: . 3 > blue
. . 4 > black
: . 5 > yellow
: . $6>$ red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 25) | (-infinity, 4) | (-36,infinity) | (-infinity, 0) |
| . 4 | $(-3,0),(7,0)$ | $(5,0),(9,0)$ | $(-7,0),(5,0)$ | $(-3,0)$ |
| . 5 | $(2,25)$ | $(7,4)$ | $(-1,-36)$ | $(-3,0)$ |
| . 6 | Maximum | Maximum | Minimum | Maximum |
| . 7 | $\max =25$ | $\max =4$ | min $=-36$ | $\max =0$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(400-0.2 x) x] \\
.2=[1000.00,200000]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(3000+500 x)(90-x)] \\
.2=\{9500,38500\} \\
.3=[24000,1152000]
\end{array}\right], A n s 8=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
A r e a R=x(x+6)
\end{array}\right]
$$

X [Page $=0021]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00022XX Function03 Answers for No. 13010

Ans1 : . 1 > blue
: $.2>$ red
: . $3>$ green
: . 4 > gray
: $.5>$ yellow
: . 6 > black

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity, infinity) |
| . 3 | (-infinity, 25) | (-infinity, 0) | (-16, infinity) | (-64, infinity) |
| . 4 | $(-5,0),(5,0)$ | $(6,0)$ | $(0,0),(8,0)$ | $(-7,0),(9,0)$ |
| . 5 | $(0,25)$ | $(6,0)$ | ( 4, -16) | ( $1,-64$ ) |
| . 6 | Maximum | Maximum | Minimum | Minimum |
| . 7 | $\max =25$ | $\max =0$ | $\min =-16$ | $\min =-64$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(100-0.2 x) x] \\
.2=[250.00,12500]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(4000+500 x)(80-x)] \\
.2=\{13000,31000\} \\
.3=[22000,968000]
\end{array}\right], \text { Ans } 8=
$$

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+9)
\end{array}\right] \\
.3=190 \\
.4=12 \\
.5=\left[\begin{array}{c}
A S=49 \\
A R=112
\end{array}\right] \\
.6=[\mathrm{f}(x)=9 x]
\end{array}\right]
$$

X [Page $=0022]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
:. $2>$ gray
: . $3>$ red
. . $4>$ blue
:. 5 > black
: . $6>$ green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (-36,infinity) | (-36,infinity) | (-infinity, 1) | (-infinity, 0) |
| . 4 | $(-4,0),(8,0)$ | $(-5,0),(7,0)$ | $(4,0),(6,0)$ | $(9,0)$ |
| . 5 | $(2,-36)$ | $(1,-36)$ | $(5,1)$ | $(9,0)$ |
| . 6 | Minimum | Minimum | Maximum | Maximum |
| . 7 | min $=-36$ | $\min =-36$ | $\max =1$ | $\max =0$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { AreaR }=x(x+3)
\end{array}\right] \\
.3=88 \\
4=4 \\
.5=\left[\begin{array}{l}
A S=169 \\
A R=208
\end{array}\right] \\
.6=[\mathrm{f}(x)=3 x]
\end{array}\right]
$$

x [Page = 0023] xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00024XX Function03 Answers for No. 13028

Ans1 : . 1 > black
: $.2>\mathrm{red}$
:. $3>$ green
: . 4 > gray
: $.5>$ yellow
: . $6>$ blue

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 16) | (-4,infinity) | (0, infinity) | (-infinity, 1 ) |
| . 4 | $(-5,0),(3,0)$ | $(3,0),(7,0)$ | $(-7,0)$ | $(2,0),(4,0)$ |
| . 5 | $(-1,16)$ | $(5,-4)$ | $(-7,0)$ | $(3,1)$ |
| . 6 | Maximum | Minimum | Minimum | Maximum |
| . 7 | $\max =16$ | $\min =-4$ | $\min =0$ | $\max =1$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+4)
\end{array}\right] \\
.3=12 \\
.4=3 \\
.5=\left[\begin{array}{c}
A S=81 \\
A R=117
\end{array}\right] \\
.6=[\mathrm{f}(x)=4 x]
\end{array}\right]
$$

x [Page = 0024] xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00025XX Function03 Answers for No. 13068

Ans1 : . 1 > red
: $.2>$ blue
: . 3 > gray
:. $4>$ black
: . $5>$ yellow
:. $6>$ green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity,0) | (-infinity, 4) | (-4,infinity) | (-1, infinity) |
| . 4 | $(-7,0)$ | $(0,0),(4,0)$ | $(-1,0),(3,0)$ | $(-3,0),(-1,0)$ |
| . 5 | $(-7,0)$ | $(2,4)$ | $(1,-4)$ | $(-2,-1)$ |
| . 6 | Maximum | Maximum | Minimum | Minimum |
| . 7 | $\max =0$ | $\max =4$ | $\min =-4$ | $\min =-1$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+7)
\end{array}\right] \\
.3=120 \\
.4=12 \\
.5=\left[\begin{array}{c}
A S=81 \\
A R=144
\end{array}\right] \\
.6=[\mathrm{f}(x)=7 x]
\end{array}\right]
$$

x [Page $=0025]$ xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
: . $2>$ green
:. $3>$ gray
: . $4>$ red
: $.5>$ blue
:. 6 > black

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 0) | (-infinity, 16) | (-4,infinity) | (-9,infinity) |
| . 4 | $(-6,0)$ | $(-5,0),(3,0)$ | $(4,0),(8,0)$ | $(-1,0),(5,0)$ |
| . 5 | $(-6,0)$ | $(-1,16)$ | $(6,-4)$ | $(2,-9)$ |
| . 6 | Maximum | Maximum | Minimum | Minimum |
| . 7 | $\max =0$ | $\max =16$ | $\min =-4$ | $\min =-9$ |

$$
=\left[\begin{array}{c}
. l=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+2)
\end{array}\right] \\
.3=8 \\
.4=10 \\
.5=\left[\begin{array}{c}
A S=144 \\
A R=168
\end{array}\right] \\
.6=[\mathrm{f}(x)=2 x]
\end{array}\right]
$$

X [Page $=0026]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00027XX Function03 Answers for No. 13111

Ans1 : . 1 > green
: . 2 > gray
: . 3 > yellow
. . 4 > black
: . $5>$ red
: . 6 > blue

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) |
| . 3 | (-infinity, 4) | (-infinity, 4) | (0, infinity) | (-4,infinity) |
| . 4 | $(0,0),(4,0)$ | $(-3,0),(1,0)$ | $(-4,0)$ | $(1,0),(5,0)$ |
| . 5 | $(2,4)$ | $(-1,4)$ | $(-4,0)$ | $(3,-4)$ |
| . 6 | Maximum | Maximum | Minimum | Minimum |
| . 7 | $\max =4$ | $\max =4$ | $\min =0$ | $\min =-4$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(300-0.4 x) x] \\
.2=[375.00,56250]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(4000+400 x)(90-x)] \\
.2=\{8800,31200\} \\
.3=[20000,1000000]
\end{array}\right], A n s 8=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
A r e a R=x(x+3)
\end{array}\right]
$$

X [Page $=0027]$ xXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00028XX Function03 Answers for No. 13116

Ans1 : . 1 > gray
: . 2 > yellow
: . 3 > green
. . 4 > black
: . 5 > blue
: . $6>$ red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (-36, infinity) | (-infinity, 9) | (0,infinity) | (-infinity, 64) |
| . 4 | $(-4,0),(8,0)$ | $(-3,0),(3,0)$ | $(9,0)$ | $(-8,0),(8,0)$ |
| . 5 | $(2,-36)$ | $(0,9)$ | $(9,0)$ | $(0,64)$ |
| . 6 | Minimum | Maximum | Minimum | Maximum |
| . 7 | min $=-36$ | $\max =9$ | $\min =0$ | $\max =64$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+7)
\end{array}\right] \\
.3=144 \\
.4=6 \\
.5=\left[\begin{array}{c}
A S=144 \\
A R=228
\end{array}\right] \\
.6=[\mathrm{f}(x)=7 x]
\end{array}\right]
$$

x [Page = 0028] xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00029XX Function03 Answers for No. 13122

Ans1 : . 1 > gray
: . $2>$ green
: . 3 > black
: . 4 > yellow
. . 5 > blue
: . 6 > red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-4,infinity) | (0,infinity) | (-infinity, 9) | (-4,infinity) |
| . 4 | $(2,0),(6,0)$ | $(-8,0)$ | $(-3,0),(3,0)$ | $(-6,0),(-2,0)$ |
| . 5 | $(4,-4)$ | $(-8,0)$ | $(0,9)$ | $(-4,-4)$ |
| . 6 | Minimum | Minimum | Maximum | Minimum |
| . 7 | $\min =-4$ | $\min =0$ | $\max =9$ | $\min =-4$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(400-0.2 x) x] \\
.2=[1000.00,200000]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(4000+400 x)(130-x)] \\
.2=\{12400,43600\} \\
.3=[28000,1960000]
\end{array}\right], A n s 8=\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\text { AreaR }=x(x+1)
\end{array}\right] \\
.3=72 \\
.4=12 \\
.5=\left[\begin{array}{l}
A S=169 \\
A R=182
\end{array}\right] \\
.6=[\mathrm{f}(x)=x]
\end{array}\right]
$$

[^3]Ans1 : . 1 > gray
:. $2>$ green
: . $3>$ blue
. . $4>$ red
:. 5 > black
: . 6 > yellow

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (0,infinity) | (-infinity, 9) | (-36, infinity) | (-16, infinity) |
| . 4 | $(-2,0)$ | $(1,0),(7,0)$ | $(-8,0),(4,0)$ | $(-4,0),(4,0)$ |
| . 5 | $(-2,0)$ | $(4,9)$ | $(-2,-36)$ | $(0,-16)$ |
| . 6 | Minimum | Maximum | Minimum | Minimum |
| . 7 | $\min =0$ | $\max =9$ | min $=-36$ | $\min =-16$ |

$$
\left[\begin{array}{c}
. l=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+3)
\end{array}\right] \\
.3=154 \\
.4=7 \\
.5=\left[\begin{array}{l}
A S=36 \\
A R=54
\end{array}\right] \\
.6=[\mathrm{f}(x)=3 x]
\end{array}\right]
$$

X [Page $=0030]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00031XX Function03 Answers for No. 13126

Ans1 : . 1 > gray
: . $2>$ blue
: . 3 > yellow
: . 4 > black
: . $5>$ red
: . $6>$ green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity, infinity) |
| . 3 | (-infinity, 9) | (-1,infinity) | (-infinity, 16) | (-infinity, 0) |
| . 4 | $(-7,0),(-1,0)$ | $(-2,0),(0,0)$ | $(-4,0),(4,0)$ | $(9,0)$ |
| . 5 | $(-4,9)$ | $(-1,-1)$ | $(0,16)$ | $(9,0)$ |
| . 6 | Maximum | Minimum | Maximum | Maximum |
| . 7 | $\max =9$ | $\min =-1$ | $\max =16$ | $\max =0$ |

$$
A n s 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(600-0.3 x) x] \\
.2=[1000.00,300000]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(4000+500 x)(70-x)] \\
.2=\{12000,27000\} \\
.3=[19500,760500]
\end{array}\right], A n s 8=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
.1=\left[\begin{array}{c}
\text { AreaR }=x(x+8)
\end{array}\right] \\
.3=180 \\
.4=7 \\
A=\left[\begin{array}{c}
A S=100 \\
A R=180
\end{array}\right] \\
.6=[\mathrm{f}(x)=8 x]
\end{array}\right]
$$

X [Page $=0031]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00032XX Function03 Answers for No. 13421

Ans1 : . 1 > black
: . 2 > gray
: . 3 > yellow
:. $4>$ green
. . 5 > blue
: . 6 > red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (-9,infinity) | (-infinity, 0) | (-infinity, 4) | (-infinity, 16) |
| . 4 | $(-5,0),(1,0)$ | $(-5,0)$ | $(2,0),(6,0)$ | $(0,0),(8,0)$ |
| . 5 | $(-2,-9)$ | $(-5,0)$ | $(4,4)$ | $(4,16)$ |
| . 6 | Minimum | Maximum | Maximum | Maximum |
| . 7 | $\min =-9$ | $\max =0$ | $\max =4$ | $\max =16$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+6)
\end{array}\right] \\
.3=27 \\
.4=10 \\
.5=\left[\begin{array}{l}
A S=121 \\
A R=187
\end{array}\right] \\
.6=[\mathrm{f}(x)=6 x]
\end{array}\right]
$$

X [Page = 0032] XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00033XX Function03 Answers for No. 13646

Ans1 : . 1 > gray
: . 2 > green
: . 3 > yellow
: . 4 > black
. .5 > blue
: . $6>$ red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (0,infinity) | (-infinity, 9) | (-infinity, 16) | (-1, infinity) |
| . 4 | $(9,0)$ | $(-1,0),(5,0)$ | $(-7,0),(1,0)$ | $(-7,0),(-5,0)$ |
| . 5 | $(9,0)$ | $(2,9)$ | $(-3,16)$ | $(-6,-1)$ |
| . 6 | Minimum | Maximum | Maximum | Minimum |
| . 7 | $\min =0$ | $\max =9$ | $\max =16$ | $\min =-1$ |

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { AreaR }=x(x+11)
\end{array}\right] \\
.3=80 \\
.4=8 \\
.5=\left[\begin{array}{l}
A S=100 \\
A R=210
\end{array}\right] \\
.6=[\mathrm{f}(x)=11 x]
\end{array}\right]
$$

X [Page $=0033]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00034XX Function03 Answers for No. 13862

Ans1 : . 1 > red
: . 2 > gray
: . 3 > yellow
: . 4 > blue
: . 5 > black
: . 6 > green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity, infinity) | (-infinity,infinity) |
| . 3 | (-4,infinity) | (-infinity, 4) | (0, infinity) | (-infinity, 1) |
| . 4 | $(3,0),(7,0)$ | $(-5,0),(-1,0)$ | $(1,0)$ | $(-8,0),(-6,0)$ |
| . 5 | $(5,-4)$ | $(-3,4)$ | $(1,0)$ | $(-7,1)$ |
| . 6 | Minimum | Maximum | Minimum | Maximum |
| . 7 | $\min =-4$ | $\max =4$ | $\min =0$ | $\max =1$ |

$$
A n s 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(100-0.1 x) x] \\
.2=[500.00,25000]
\end{array}\right], A n s 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(3000+500 x)(90-x)] \\
.2=\{9000,39000\} \\
.3=[24000,1152000]
\end{array}\right], A n s 8=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+9)
\end{array}\right] \begin{gathered}
.1=\left[\begin{array}{c}
3=70 \\
.4=3 \\
.5=\left[\begin{array}{c}
A S=36 \\
A R=90
\end{array}\right] \\
.6=[\mathrm{f}(x)=9 x]
\end{array}\right]
\end{gathered}
$$

X [Page $=0034]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00035XX Function03 Answers for No. 13943

Ans1 : . 1 > black
: . 2 > yellow
: . 3 > green
: . 4 > gray
. $.5>$ blue
: . 6 > red

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 16) | (-4,infinity) | (-infinity, 0) | (-infinity, 4) |
| . 4 | $(-4,0),(4,0)$ | $(-7,0),(-3,0)$ | $(-3,0)$ | $(5,0),(9,0)$ |
| . 5 | $(0,16)$ | $(-5,-4)$ | $(-3,0)$ | $(7,4)$ |
| . 6 | Maximum | Minimum | Maximum | Maximum |
| . 7 | $\max =16$ | $\min =-4$ | $\max =0$ | $\max =4$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(300-0.2 x) x] \\
.2=[750.00,112500]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(4000+400 x)(80-x)] \\
.2=\{9600,26400\} \\
.3=[18000,810000]
\end{array}\right], \text { Ans } 8=
$$

$$
\left[\begin{array}{c}
.1=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\operatorname{AreaR}=x(x+1)
\end{array}\right] \\
.3=132 \\
4=8 \\
.5=\left[\begin{array}{l}
A S=100 \\
A R=110
\end{array}\right] \\
.6=[\mathrm{f}(x)=x]
\end{array}\right]
$$

x [Page $=0035]$ xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00036XX Function03 Answers for No. 13968

Ans1 : . 1 > black
: . $2>$ blue
: . $3>$ green
:. $4>$ yellow
: . $5>$ red
:. $6>$ gray

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity, infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-infinity, 4) | (-infinity, 49) | ( -4 , infinity) | (-infinity, 0) |
| . 4 | $(-7,0),(-3,0)$ | $(-6,0),(8,0)$ | $(1,0),(5,0)$ | $(-5,0)$ |
| . 5 | $(-5,4)$ | $(1,49)$ | $(3,-4)$ | $(-5,0)$ |
| . 6 | Maximum | Maximum | Minimum | Maximum |
| . 7 | $\max =4$ | $\max =49$ | $\min =-4$ | $\max =0$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(500-0.4 x) x] \\
.2=[625.00,156250]
\end{array}\right], \operatorname{Ans} 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(6000+600 x)(70-x)] \\
.2=\{15600,32400\} \\
.3=[24000,960000]
\end{array}\right], \text { Ans } 8=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
.1=\left[\begin{array}{c}
\text { AreaR }=x(x+11)
\end{array}\right] \\
.3=80 \\
.4=12 \\
A S=\left[\begin{array}{c}
A S=36 \\
A R=102
\end{array}\right] \\
.6=[\mathrm{f}(x)=11 x]
\end{array}\right]
$$

X [Page $=0036]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

X Math@MUT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXM5/2-6600403-00037XX Function03 Answers for No. 14006

Ans1 : . 1 > blue
: $.2>$ yellow
: $.3>$ red
: . 4 > black
:. $5>$ gray
: . $6>$ green

| Ans | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 | (-1, infinity) | (-infinity, 4) | (-infinity, 9) | (0,infinity) |
| . 4 | $(3,0),(5,0)$ | $(-8,0),(-4,0)$ | $(-7,0),(-1,0)$ | $(-2,0)$ |
| . 5 | $(4,-1)$ | $(-6,4)$ | $(-4,9)$ | $(-2,0)$ |
| . 6 | Minimum | Maximum | Maximum | Minimum |
| . 7 | $\min =-1$ | $\max =4$ | $\max =9$ | $\min =0$ |

$$
\text { Ans } 6=\left[\begin{array}{c}
.1=[\mathrm{P}(x)=(200-0.4 x) x] \\
.2=[250.00,25000]
\end{array}\right], \text { Ans } 7=\left[\begin{array}{c}
.1=[\operatorname{Income}(x)=(3000+300 x)(80-x)] \\
.2=\{8400,18600\} \\
.3=[13500,607500]
\end{array}\right], \text { Ans } 8=\left[\begin{array}{c}
.1-[\operatorname{AreaR}=x(x+1) \\
.3=110 \\
.4=3 \\
.5=\left[\begin{array}{l}
A S=64 \\
A R=72
\end{array}\right] \\
.6=[\mathrm{f}(x)=x]
\end{array}\right.
$$

[^4]: $.2>$ blue
: . 3 > yellow
. . $4>$ gray
:. $5>$ green
:. $6>$ black

| Ans I | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| . 2 \| | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) | (-infinity,infinity) |
| . 3 \| | (-infinity, 36) | (-9,infinity) | (-infinity, 25) | (0,infinity) |
| . 41 | $(-6,0),(6,0)$ | $(-4,0),(2,0)$ | $(-2,0),(8,0)$ | $(4,0)$ |
| . 51 | $(0,36)$ | $(-1,-9)$ | $(3,25)$ | $(4,0)$ |
| . 61 | Maximum | Minimum | Maximum | Minimum |
| . 71 | $\max =36$ | $\min =-9$ | $\max =25$ | $\min =0$ |

$$
\left[\begin{array}{c}
. l=\left[\begin{array}{c}
\operatorname{AreaS}(x)=x^{2} \\
\text { AreaR }=x(x+2)
\end{array}\right] \\
.3=63 \\
.4=5 \\
.5=\left[\begin{array}{l}
A S=121 \\
A R=143
\end{array}\right] \\
.6=[\mathrm{f}(x)=2 x]
\end{array}\right]
$$

X [Page $=0038]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

##  [ $>$


[^0]:    X [Page $=0004]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

[^1]:    X [Page $=0007$ ]

[^2]:    X [Page $=0013]$ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

[^3]:    

[^4]:    

