Trace

main function

foo   [10]

[34]   return value to print

Trace

foo function
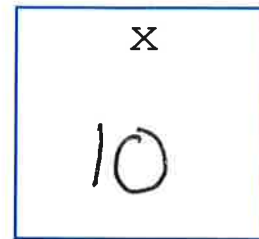
x

x
10

```
if( x <= 0 ){

    return 1;

}
```

return
34

```
if( x % 2 == 0 ){
                            9
    return x + bar( x - 1 );  ←
                                    24
}
```

10   9

```
else{

    return x + foo( x - 4 );


}
```
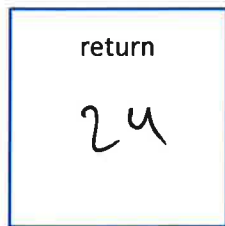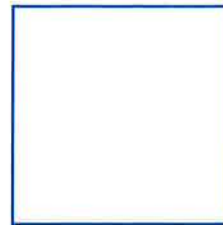
Trace

bar function

y

9

```
if( x <= 0 ){
    return 2;
}
```

return

24

```
if( x % 2 == 0 ){
    return y + foo( y - 2 );

}
```

```
else{
    6
    return y + bar( y - 3 )  ←

}
```

9

15

Trace
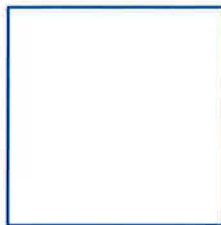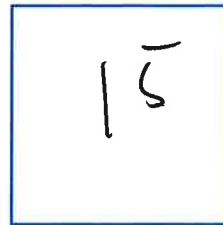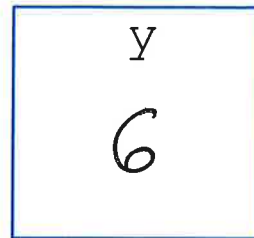
bar function

y

6

```
if( x <= 0 ){
    return 2;
}
```

return

15

```
if( x % 2 == 0 ){        4
    return y + foo( y - 2 );
}
```
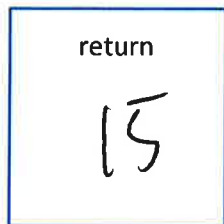
6   9

```
else{
    return y + bar( y - 3 );
}
```
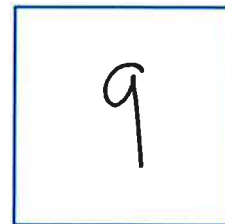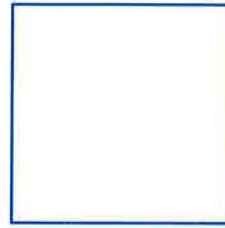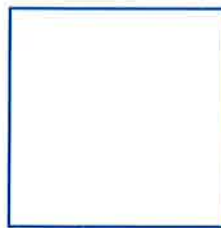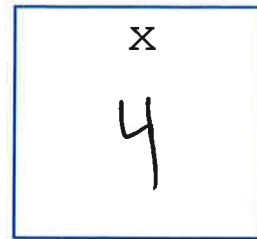
Trace

foo function

x

4

```
if( x <= 0 ){

    return 1;

}
```

return

9

```
if( x % 2 == 0 ){        3

    return x + bar( x - 1 );
```

4   **5**

```
}

else{

    return x + foo( x - 4 );
```

```
}
```

Trace

bar function

y
3

```
if( x <= 0 ){
    return 2;
}
```

return
5

```
if( x % 2 == 0 ){
    return y + foo( y - 2 );

}
else{
    return y + bar( y - 3 );
}
```

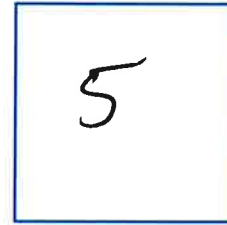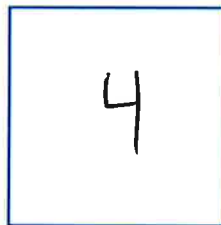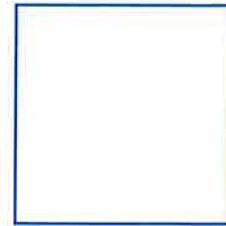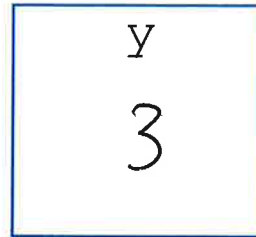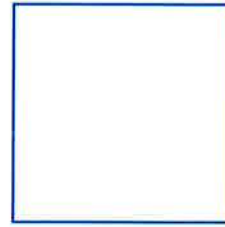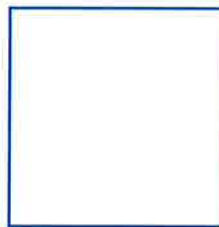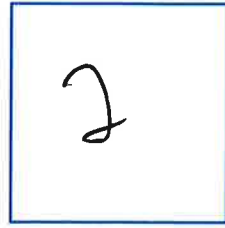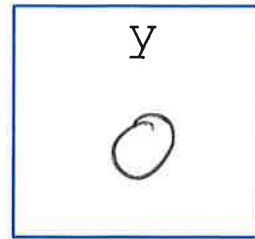3   2

Trace

bar function

y
O
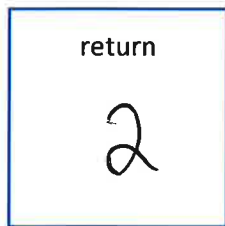
```
if( x <= 0 ){
    return 2;
}
```
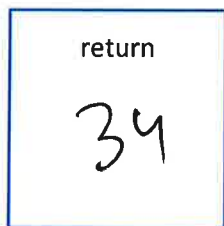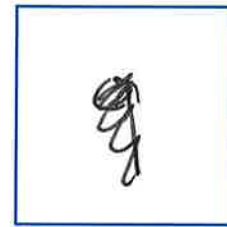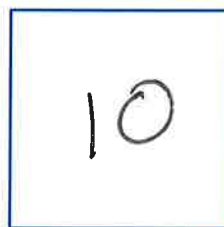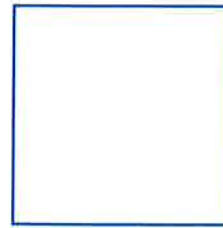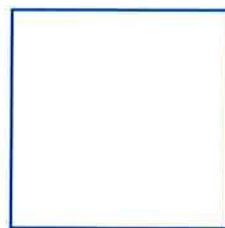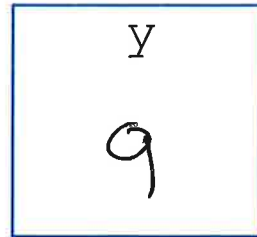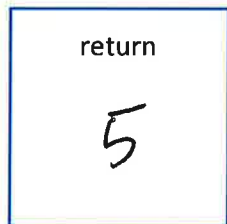
return
2

```
if( x % 2 == 0 ){
    return y + foo( y - 2 );
    [  ]  [  ]
}

else{
    return y + bar( y - 3 );
    [  ]  [  ]
}
```