

```

<html>
<script type="text/javascript">
1 var ans = 0;
2 var firstnum = 0;
3 var secondnum = 0;
4 var whattodo;
5 firstnum = prompt("Enter the first number",0);
6 secondnum = prompt("Enter the second number",0);
7 whattodo = prompt("Enter * or /,*,*");
8 if (whattodo == "*")
9 {
10     ans = firstnum * secondnum;
11 }
12 else
13 {
14     ans = firstnum / secondnum;
15 }
16 document.write("The answer is ", ans);
17 </script>
18 </html>

```

Here I check for whattodo equal to *. Notice that equal is written with ==. If whattodo is not * then I take the else and do the divide. Note that anything that is not an * will be executed. So a z will do the divide and a 5 will do the divide.

Mar 8-10:54 AM

```

<html>
<script type="text/javascript">
1 var ans = 0;
2 var firstnum = 0;
3 var secondnum = 0;
4 var whattodo;
5 firstnum = prompt("Enter the first number",0);
6 secondnum = prompt("Enter the second number",0);
7 whattodo = prompt("Enter * or /,*,*");
8 if (whattodo == "*")
9 {
10     ans = firstnum * secondnum;
11 }
12 else
13 {
14     ans = firstnum / secondnum;
15 }
16 document.write("The answer is ", ans);
17 </script>
18 </html>

```

Now I want to make it so I ask about the /. If it is not a slash I want it to write out 0 or maybe the word problem.

Mar 8-11:03 AM

```

<html>
<script type="text/javascript">
1 var ans = 0;
2 var firstnum = 0;
3 var secondnum = 0;
4 var whattodo;
5 firstnum = prompt("Enter the first number",0);
6 secondnum = prompt("Enter the second number",0);
7 whattodo = prompt("Enter * or /,*,*");
8 if (whattodo == "*")
9 {
10     ans = firstnum * secondnum;
11 }
12 else
13 {
14     if (whattodo == "/")
15     {
16         ans = firstnum / secondnum;
17     }
18     else
19     {
20         ans = 0;
21     }
22 }
23 document.write("The answer is ", ans);
24 </script>
25 </html>

```

Now if I enter a z or a 5 it will make the ans 0. The only time I will do a divide is when I enter the /.

Mar 8-11:08 AM

```

<html>
<script type="text/javascript">
1 var ans = 0;
2 var firstnum = 0;
3 var secondnum = 0;
4 var whattodo;
5 firstnum = prompt("Enter the first number",0);
6 secondnum = prompt("Enter the second number",0);
7 whattodo = prompt("Enter * or /,*,*");
8 if (whattodo == "*")
9 {
10     ans = firstnum * secondnum;
11 }
12 else
13 {
14     if (whattodo == "/")
15     {
16         ans = firstnum / secondnum;
17     }
18     else
19     {
20         ans = 0;
21     }
22 }
23 document.write("The answer is ", ans);
24 </script>
25 </html>

```

Mar 8-11:08 AM

```

<html>
<script type="text/javascript">
1 var ans = 0;
2 var firstnum = 0;
3 var secondnum = 0;
4 var whattodo;
5 firstnum = prompt("Enter the first number",0);
6 secondnum = prompt("Enter the second number",0);
7 whattodo = prompt("Enter * or /,*,*");
8 if (whattodo == "*")
9 {
10     ans = firstnum * secondnum;
11 }
12 else
13 {
14     if (whattodo == "/")
15     {
16         ans = firstnum / secondnum;
17     }
18     else
19     {
20         ans = 0;
21     }
22 }
23 document.write("The answer is ", ans);
24 </script>
25 </html>

```

Mar 8-11:08 AM

```

<html>
<script type="text/javascript">
1 var ans = 0;
2 var firstnum = 0;
3 var secondnum = 0;
4 var whattodo;
5 firstnum = prompt("Enter the first number",0);
6 secondnum = prompt("Enter the second number",0);
7 whattodo = prompt("Enter * or /,*,*");
8 if (whattodo == "*")
9 {
10     ans = firstnum * secondnum;
11 }
12 else
13 {
14     if (whattodo == "/")
15     {
16         ans = firstnum / secondnum;
17     }
18     else
19     {
20         ans = 0;
21     }
22 }
23 document.write("The answer is ", ans);
24 </script>
25 </html>

```

Note that T or Y work and N or F also work.

Mar 8-11:08 AM

```

<html>
<script type="text/javascript">
var ans = 0;
var firstnum = 0;
var secondnum = 0;
var whattodo;
firstnum = prompt("Enter the first number",0);
secondnum = prompt("Enter the second number",0);
wattodo = prompt("Enter * or /,*");
if (wattodo == "*")
{
    ans = firstnum * secondnum;
}
else
{
    if (wattodo == "/")
    {
        ans = firstnum / secondnum;
    }
    else
    {
        if (wattodo == "+")
        {
            ans = parseFloat(firstnum) + parseFloat(secondnum);
        }
        else
        {
            if (wattodo == "-")
            {
                ans = firstnum - secondnum;
            }
            else
            {
                ans = 0;
            }
        }
    }
}
document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:09 AM

```

<html>
<script type="text/javascript">
var ans = 0;
var firstnum = 0;
var secondnum = 0;
var whattodo;
firstnum = prompt("Enter the first number",0);
secondnum = prompt("Enter the second number",0);
wattodo = prompt("Enter * or /,*");
if (wattodo == "*")
{
    ans = firstnum * secondnum;
}
else
{
    if (wattodo == "/")
    {
        ans = firstnum / secondnum;
    }
    else
    {
        if (wattodo == "+")
        {
            ans = firstnum + secondnum;
        }
        else
        {
            if (wattodo == "-")
            {
                ans = firstnum - secondnum;
            }
            else
            {
                ans = 0;
            }
        }
    }
}
document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:13 AM

```

<html>
<script type="text/javascript">
var ans = 0;
var firstnum = 0;
var secondnum = 0;
var whattodo;
firstnum = prompt("Enter the first number",0);
secondnum = prompt("Enter the second number",0);
wattodo = prompt("Enter * or /,*");
if (wattodo == "*")
{
    ans = firstnum * secondnum;
}
else
{
    if (wattodo == "/")
    {
        ans = firstnum / secondnum;
    }
    else
    {
        if (wattodo == "+")
        {
            ans = parseFloat(firstnum) + parseFloat(secondnum);
        }
        else
        {
            if (wattodo == "-")
            {
                ans = firstnum - secondnum;
            }
            else
            {
                ans = 0;
            }
        }
    }
}
document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:18 AM

```

multdiv - Notepad
File Edit Format View Help
if (wattodo == "*")
{
    ans = firstnum * secondnum;
}
else
{
    if (wattodo == "/")
    {
        ans = firstnum / secondnum;
    }
    else
    {
        if (wattodo == "+")
        {
            ans = parseFloat(firstnum) + parseFloat(secondnum);
        }
        else
        {
            if (wattodo == "-")
            {
                ans = firstnum - secondnum;
            }
            else
            {
                ans = 0;
            }
        }
    }
}

```

Mar 8-11:32 AM

```

multdiv - Notepad
File Edit Format View Help
if (wattodo == "*")
{
    ans = firstnum * secondnum;
}
else
{
    if (wattodo == "/")
    {
        ans = firstnum / secondnum;
    }
    else
    {
        if (wattodo == "+")
        {
            ans = parseFloat(firstnum) + parseFloat(secondnum);
        }
        else
        {
            if (wattodo == "-")
            {
                ans = firstnum - secondnum;
            }
            else
            {
                ans = 0;
            }
        }
    }
}

```

This now tests for all the arithmetic possibilities. Notice I connected the curly braces to show how they go together.

Mar 8-11:33 AM

```

<html>
<script type="text/javascript">
var ans = 0;
var firstnum = 0;
var secondnum = 0;
var whattodo;
firstnum = prompt("Enter the first number",0);
secondnum = prompt("Enter the second number",0);
wattodo = prompt("Enter * or /,*");
if (wattodo == "*")
{
    ans = firstnum * secondnum;
}
else
{
    if (wattodo == "/")
    {
        ans = firstnum / secondnum;
    }
    else
    {
        if (wattodo == "+")
        {
            ans = firstnum + secondnum;
        }
        else
        {
            if (wattodo == "-")
            {
                ans = firstnum - secondnum;
            }
            else
            {
                ans = 0;
            }
        }
    }
}
document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:35 AM

```

<html>
<script type="text/javascript">
var ans = 0;
var firstnum = 0;
var secondnum = 0;
var whattodo;
firstnum = prompt("Enter the first number",0);
secondnum = prompt("Enter the second number",0);
whttodox = prompt("Enter * or / or + or -","");
if (whttodox == "*")
{
    ans = firstnum * secondnum;
}
else
{
    if (whttodox == "/")
    {
        ans = firstnum / secondnum;
    }
    else
    {
        if (whttodox == "+")
        {
            ans = parseFloat(firstnum) + parseFloat(secondnum);
        }
        else
        {
            if (whttodox == "-")
            {
                ans = firstnum - secondnum;
            }
        }
    }
}
document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:39 AM

```

<html>
<script type="text/javascript">
}
else
{
    if (whttodox == "/")
    {
        ans = firstnum / secondnum;
    }
    else
    {
        if (whttodox == "+")
        {
            ans = parseFloat(firstnum) + parseFloat(secondnum);
        }
        else
        {
            if (whttodox == "-")
            {
                ans = firstnum - secondnum;
            }
            else
            {
                ans = 0;
            }
        }
    }
}
document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:39 AM

Response to question about doing separate if statements.

The problem is how do you handle the error entries. The way I have it if I put in an * then it does the multiply. Then it finds it is not a / and drops through and checks and finds that it is not a + and drops through and finds it is not a subtract sign. But at that point it takes the else and replaces the multiply answer with a 0. That is a problem. There is no easy solution.

```

<html>
<script type="text/javascript">
var secondnum = 0;
var whattodo;
firstnum = prompt("Enter the first number",0);
secondnum = prompt("Enter the second number",0);
whttodox = prompt("Enter * or / or + or -","");
if (whttodox == "*")
{
    ans = firstnum * secondnum;
}
if (whttodox == "/")
{
    ans = firstnum / secondnum;
}
if (whttodox == "+")
{
    ans = parseFloat(firstnum) + parseFloat(secondnum);
}
if (whttodox == "-")
{
    ans = firstnum - secondnum;
}
else
{
    ans = 0;
}

document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:42 AM

```

<html>
<script type="text/javascript">
var secondnum = 0;
var whattodo;
firstnum = prompt("Enter the first number",0);
secondnum = prompt("Enter the second number",0);
whttodox = prompt("Enter * or / or + or -","");
if (whttodox == "*")
{
    ans = firstnum * secondnum;
}
if (whttodox == "/")
{
    ans = firstnum / secondnum;
}
if (whttodox == "+")
{
    ans = parseFloat(firstnum) + parseFloat(secondnum);
}
if (whttodox == "-")
{
    ans = firstnum - secondnum;
}
else
{
    ans = 0;
}

document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:47 AM

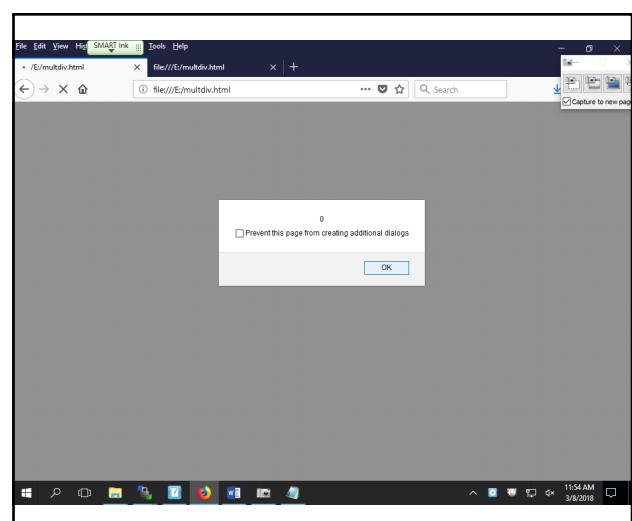
```

<html>
<script type="text/javascript">
var secondnum = 0;
var whattodo;
firstnum = prompt("Enter the first number",0);
secondnum = prompt("Enter the second number",0);
whttodox = prompt("Enter * or / or + or -","");
if (whttodox == "*")
{
    ans = firstnum * secondnum;
}
if (whttodox == "/")
{
    ans = firstnum / secondnum;
}
if (whttodox == "+")
{
    ans = parseFloat(firstnum) + parseFloat(secondnum);
}
if (whttodox == "-")
{
    ans = firstnum - secondnum;
}
else
{
    ans = 0;
}

document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:50 AM



Mar 8-11:54 AM

```

<html>
<script type="text/javascript">
var ans = 0;
var firstnum = 0;
var secondnum = 0;
var whattodo;
firstnum = prompt("Enter the first number");
secondnum = prompt("Enter the second number");
whattodo = prompt("* or / or + or -");
if (whattodo == "*")
{
    ans = firstnum * secondnum;
    alert(ans);
}
if (whattodo == "/")
{
    ans = firstnum / secondnum;
    alert(ans);
}
if (whattodo == "+")
{
    ans = firstnum + secondnum;
    alert(ans);
}
if (whattodo == "-")
{
    ans = firstnum - secondnum;
    alert(ans);
}
document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:56 AM

```

multdiv - Notepad
File Edit Format View Help
seconnum = prompt("Enter the second number");
whattodo = prompt("* or / or + or -");
if (whattodo == "*") {
    ans = firstnum * seconnum;
    alert(ans);
}
if (whattodo == "/") {
    ans = firstnum / seconnum;
    alert(ans);
}
if (whattodo == "+") {
    ans = parseFloat(firstnum) + parseFloat(seconnum);
    alert(ans);
}
if (whattodo == "-") {
    ans = firstnum - seconnum;
    alert(ans);
}
else {
    ans = 0;
    alert(ans);
}

document.write("The answer is ", ans);
</script>
</html>

```

Mar 8-11:57 AM

```

<html>
<script type="text/javascript">
var myPoints;
var msg;
myPoints = prompt("Enter the number of points you have earned",0);
if (myPoints < 10)
{
    msg = "Not enough points for a prize";
}
else
{
    if (myPoints <= 50)
    {
        msg = "You can choose a prize from group B";
    }
    else
    {
        msg = "You can choose a prize from group A";
    }
}
document.write(msg);
</script>
</html>

```

Hand-drawn flowchart:

```

graph TD
    Start((Start)) --> Cond1{ }
    Cond1 -- N --> NoPrize[No prize]
    Cond1 -- Y --> Cond2{ }
    Cond2 -- N --> GroupB[Group B]
    Cond2 -- Y --> GroupA[Group A]
    GroupB --> End((End))
    GroupA --> End

```

Mar 8-12:00 PM

```

<html>
<script type="text/javascript">
var myPoints;
var msg;
myPoints = prompt("Enter the number of points you have earned",0);
if (myPoints < 10)
{
    msg = "Not enough points for a prize";
}
else
{
    if (myPoints <= 50)
    {
        msg = "You can choose a prize from group B";
    }
    else
    {
        msg = "You can choose a prize from group A";
    }
}
document.write(msg);
</script>
</html>

```

Mar 8-12:01 PM

```

<html>
<head>
<title>JavaScript guess number game</title>
</head>
<body>
<script type="text/javascript">
var theName = window.prompt("Enter your name","");
var theState = window.prompt("Enter the state","");
if (theState == "MA" || theState == "RI")
{
    document.write(theName + " you live in " + theState, "<br>");
}
else
{
    document.write(theName + " you do not live in MA or RI <br>" );
}
</script>
</body>
</html>

```

Modal dialog box:

Enter your name
Susan
OK Cancel

Mar 8-12:03 PM

```

<html>
<head>
<title>JavaScript guess number game</title>
</head>
<body>
<script type="text/javascript">
var theName = window.prompt("Enter your name","");
var theState = window.prompt("Enter the state","");
if (theState == "MA" || theState == "RI")
{
    document.write(theName + " you live in " + theState, "<br>");
}
else
{
    document.write(theName + " you do not live in MA or RI <br>" );
}
</script>
</body>
</html>

```

Handwritten annotations:

- A green checkmark is placed next to the condition `if (theState == "MA" || theState == "RI")`.
- A blue double slash '||' is placed next to the condition `else`.

Mar 8-12:07 PM

```

1 <html>
2 <head>
3   <title>JavaScript guess number game</title>
4 </head>
5 <body>
6   <script type="text/javascript">
7     var theName = window.prompt("Enter your name","");
8     var theState = window.prompt("Enter the state","");
9     if (theState == "MA" || theState == "RI")
10    {
11      document.write(theName + " you live in " + theState, "<br> ");
12    }
13  else
14  {
15    document.write(theName + " you do not live in MA or RI <br> ");
16  }
17 </script>
18 </body>
19 </html>

```

Mar 8-12:07 PM

```

1 <html>
2 <head>
3   <title>JavaScript guess number game</title>
4 </head>
5 <body>
6   <script type="text/javascript">
7     var theName = window.prompt("Enter your name","");
8     var yrBirth = parseInt(window.prompt("Enter the year of birth",0));
9     var yrMarried = window.prompt("Enter your marital status","");
10    if (yrBirth > 1980 && yrBirth < 1990)
11    {
12      document.write(theName + " you meet the criteria <br> ");
13    }
14    else
15    {
16      document.write(theName + " you do not meet the criteria <br> ");
17    }
18 </script>
19 </body>
20 </html>

```

Mar 8-12:11 PM