

## Oefening 12.8

```
<Window x:Class="Oef12_8_OppDriehoek.MainWindow"
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
        Title="Oef 12.8 Oppervlakte driehoek" Height="216" Width="287">
    <Grid>
        <TextBlock HorizontalAlignment="Left" Margin="25,25,0,0"
            Text="a:" VerticalAlignment="Top"/>
        <TextBox HorizontalAlignment="Left" Height="23" Margin="47,24,0,0"
            Name="aTextBox" VerticalAlignment="Top" Width="60"/>
        <TextBlock HorizontalAlignment="Left" Margin="25,58,0,0"
            Text="b:" VerticalAlignment="Top"/>
        <TextBox HorizontalAlignment="Left" Height="23" Margin="47,57,0,0"
            x:Name="bTextBox" VerticalAlignment="Top" Width="60"/>
        <TextBlock HorizontalAlignment="Left" Margin="25,90,0,0"
            Text="c:" VerticalAlignment="Top"/>
        <TextBox HorizontalAlignment="Left" Height="23" Margin="47,89,0,0"
            x:Name="cTextBox" VerticalAlignment="Top" Width="60"/>
        <TextBlock HorizontalAlignment="Left" Margin="25,142,0,0"
            Text="Opp:" VerticalAlignment="Top"/>
        <TextBlock HorizontalAlignment="Left" Margin="56,142,0,0"
            Text="" VerticalAlignment="Top"
            Name="oppTextBlock" Foreground="Blue"/>
        <Button Content="Bereken" HorizontalAlignment="Left"
            Margin="140,24,0,0" VerticalAlignment="Top" Width="75"
            Click="Button_Click"/>

    </Grid>
</Window>

public partial class MainWindow : Window
{
    public MainWindow()
    {
        InitializeComponent();
        oppTextBlock.Text = string.Empty;
    }

    private void Button_Click(object sender, RoutedEventArgs e)
    {
        int a = Convert.ToInt32(aTextBox.Text);
        int b = Convert.ToInt32(bTextBox.Text);
        int c = Convert.ToInt32(cTextBox.Text);
        if (!GeldigeDriehoek(a, b, c))
        {
            MessageBox.Show("Deze zijden kunnen nooit een driehoek vormen",
                "driehoek",
                MessageBoxButton.OK,
                MessageBoxImage.Warning);

            return;
        }

        double s = (a + b + c) / 2.0;
        double opp = Math.Sqrt(s * (s - a) * (s - b) * (s - c));

        oppTextBlock.Text = String.Format("{0:F3}", opp);
    }

    private bool GeldigeDriehoek(int a, int b, int c)
    {

```

```
    if (a >= b && a >= c)
    {
        return a < b + c;
    }
    if (b >= c && b >= a)
    {
        return b < a + c;
    }
    return c < a + b;
} }
```