

Perl

```
1.vol of cone
use strict;
use warnings;
```

```
# Prompt user for input
print "Enter the radius of the cone: ";
my $radius = <STDIN>;
chomp($radius);
```

```
print "Enter the height of the cone: ";
my $height = <STDIN>;
chomp($height);
```

```
# Calculate volume of the cone
my $volume = 3.14159 * $radius**2 * $height / 3;
```

```
# Print the result
print "The volume of the cone is: $volume\n";
```

```
2.take x as input and solv for some mathematical eqn
#!/usr/bin/perl
```

```
use strict;
use warnings;
```

```
# Prompt user for input
print "Enter the value of x: ";
my $x = <STDIN>;
chomp($x);
```

```
# Calculate the result of the equation
my $result = $x**2 + $x + 1;
```

```
# Print the result
print "The result of  $x^2 + x + 1$  for  $x = $x$  is: $result\n";
```

3. Number divisible by 3 in 1 to 100

```
#!/usr/bin/perl
```

```
use strict;
```

```
use warnings;
```

```
# Find numbers divisible by 3 in the range from 1 to 100
```

```
for my $num (1..100) {
```

```
    if ($num % 3 == 0) {
```

```
        print "$num is divisible by 3\n";
```

```
    }
```

```
}
```

4. TSA of a cone

```
use strict;
```

```
use warnings;
```

```
# Function to calculate slant height
```

```
sub slant_height {
```

```
    my ($radius, $height) = @_;
```

```
    return sqrt($radius**2 + $height**2);
```

```
}
```

```
# Prompt user for input
```

```
print "Enter the radius of the cone: ";
```

```
my $radius = <STDIN>;
```

```
chomp($radius);
```

```
print "Enter the height of the cone: ";
```

```
my $height = <STDIN>;
```

```
chomp($height);
```

```
# Calculate slant height
```

```
my $slant_height = slant_height($radius, $height);
```

```
# Calculate lateral surface area
```

```
my $lateral_surface_area = 3.14159 * $radius * $slant_height;
```

```
# Calculate base area
```

```
my $base_area = 3.14159 * $radius**2;
```

```
# Calculate total surface area
```

```
my $total_surface_area = $lateral_surface_area + $base_area;
```

```
# Print the result
```

```
print "The total surface area of the cone is: $total_surface_area\n";
```

